

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1654MCG

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	APR 04	STN AnaVist, Version 1, to be discontinued
NEWS	3	APR 15	WPIDS, WPINDEX, and WPIX enhanced with new predefined hit display formats
NEWS	4	APR 28	EMBASE Controlled Term thesaurus enhanced
NEWS	5	APR 28	IMSRESEARCH reloaded with enhancements
NEWS	6	MAY 30	INPAFAMDB now available on STN for patent family searching
NEWS	7	MAY 30	DGENE, PCTGEN, and USGENE enhanced with new homology sequence search option
NEWS	8	JUN 06	EPFULL enhanced with 260,000 English abstracts
NEWS	9	JUN 06	KOREAPAT updated with 41,000 documents
NEWS	10	JUN 13	USPATFULL and USPAT2 updated with 11-character patent numbers for U.S. applications
NEWS	11	JUN 19	CAS REGISTRY includes selected substances from web-based collections
NEWS	12	JUN 25	CA/CAPLUS and USPAT databases updated with IPC reclassification data
NEWS	13	JUN 30	AEROSPACE enhanced with more than 1 million U.S. patent records
NEWS	14	JUN 30	EMBASE, EMBAL, and LEMBASE updated with additional options to display authors and affiliated organizations
NEWS	15	JUN 30	STN on the Web enhanced with new STN AnaVist Assistant and BLAST plug-in
NEWS	16	JUN 30	STN AnaVist enhanced with database content from EPFULL
NEWS	17	JUL 28	CA/CAPLUS patent coverage enhanced
NEWS	18	JUL 28	EPFULL enhanced with additional legal status information from the epline Register
NEWS	19	JUL 28	IFICDB, IFIPAT, and IFIUDB reloaded with enhancements
NEWS	20	JUL 28	STN Viewer performance improved
NEWS	21	AUG 01	INPADOCDB and INPAFAMDB coverage enhanced
NEWS	22	AUG 13	CA/CAPLUS enhanced with printed Chemical Abstracts page images from 1967-1998
NEWS	23	AUG 15	CAOLD to be discontinued on December 31, 2008
NEWS	24	AUG 15	CAPLUS currency for Korean patents enhanced
NEWS	25	AUG 25	CA/CAPLUS, CASREACT, and IFI and USPAT databases enhanced for more flexible patent number searching
NEWS	26	AUG 27	CAS definition of basic patents expanded to ensure comprehensive access to substance and sequence information
NEWS	27	SEP 18	Support for STN Express, Versions 6.01 and earlier, to be discontinued
NEWS	28	SEP 25	CA/CAPLUS current-awareness alert options enhanced to accommodate supplemental CAS indexing of exemplified prophetic substances

NEWS 29 SEP 26 WPIDS, WPINDEX, and WPIX coverage of Chinese and
and Korean patents enhanced

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that
specific topic.

All use of STN is subject to the provisions of the STN Customer
agreement. Please note that this agreement limits use to scientific
research. Use for software development or design or implementation
of commercial gateways or other similar uses is prohibited and may
result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 14:54:11 ON 28 SEP 2008

=> file regisry
'REGISRY' IS NOT A VALID FILE NAME
SESSION CONTINUES IN FILE 'HOME'
Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files
that are available. If you have requested multiple files, you can
specify a corrected file name or you can enter "IGNORE" to continue
accessing the remaining file names entered.

=> c[ag][gds][shn].c[ta]c[gvi]/sqsp
THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Some commands only work in certain files. For example, the EXPAND
command can only be used to look at the index in a file which has an
index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of
commands which can be used in this file.

=> c[ag][gds][shn][a]c[ta]c[gvi]/sqsp
THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Some commands only work in certain files. For example, the EXPAND
command can only be used to look at the index in a file which has an
index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of
commands which can be used in this file.

=> file registry

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.84	0.84

FILE 'REGISTRY' ENTERED AT 14:56:16 ON 28 SEP 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 26 SEP 2008 HIGHEST RN 1053621-88-7
DICTIONARY FILE UPDATES: 26 SEP 2008 HIGHEST RN 1053621-88-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdoc/properties.html>

```
=> c[ag][gds][shn].c[ta]c[gvi]/sqsp
L1      82 C[AG][GDS][SHN].C[TA]C[GVI]/SQSP
```

```
=> d hitseq
'HITSEQ' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'
```

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

REG - RN
SAM - Index Name, MF, and structure - no RN
FIDE - All substance data, except sequence data
IDE - FIDE, but only 50 names
SQIDE - IDE, plus sequence data
SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used
SQD - Protein sequence data, includes RN
SQD3 - Same as SQD, but 3-letter amino acid codes are used
SQN - Protein sequence name information, includes RN

EPROP - Table of experimental properties
PPROP - Table of predicted properties
PROP - EPROP, ETAG, PPROP and SPEC

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

ABS -- Abstract
APPS -- Application and Priority Information
BIB -- CA Accession Number, plus Bibliographic Data
CAN -- CA Accession Number
CBIB -- CA Accession Number, plus Bibliographic Data (compressed)
IND -- Index Data
IPC -- International Patent Classification
PATS -- PI, SO
STD -- BIB, IPC, and NCL

IABS -- ABS, indented, with text labels
IBIB -- BIB, indented, with text labels
ISTD -- STD format, indented

OBIB ----- AN, plus Bibliographic Data (original)
OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations
SIBIB ----- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.

The MAX format is the same as ALL.

The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

HELP DFIELDs -- To see a complete list of individual display fields.

HELP FORMATS -- To see detailed descriptions of the predefined formats.

ENTER DISPLAY FORMAT (IDE):ide

```
L1  ANSWER 1 OF 82  REGISTRY  COPYRIGHT 2008 ACS on STN
RN  1050461-47-6  REGISTRY
ED  Entered STN:   18 Sep 2008
CN  INDEX NAME NOT YET ASSIGNED
FS  PROTEIN SEQUENCE
MF  Unspecified
CI  MAN
SR  CA
LC  STN Files:    CA, CAPLUS
```

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d sqide all

```
L1  ANSWER 1 OF 82  REGISTRY  COPYRIGHT 2008 ACS on STN
RN  1050461-47-6  REGISTRY
CN  INDEX NAME NOT YET ASSIGNED
FS  PROTEIN SEQUENCE
SQL  71
```

```
SEQ      1 ELDKWASLWN WFNITNWLWY IKCNLASCNL RCDSLGLLVK CAGSECACGP
=====
```

51 EPSDARSECK RSIAPNCHAA N

HITS AT: 41-49

MF Unspecified

CI MAN

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PRP
(Properties); USES (Uses)

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
RN  1050461-47-6  REGISTRY
ED  Entered STN:   18 Sep 2008
CN  INDEX NAME NOT YET ASSIGNED
FS  PROTEIN SEQUENCE
SQL  71
```

```
SEQ      1 ELDKWASLWN WFNITNWLWY IKCNLASCNL RCDSLGLLVK CAGSECACGP
=====
```

51 EPSDARSECK RSIAPNCHAA N

HITS AT: 41-49

SEQ3 1 Glu-Leu-Asp-Lys-Trp-Ala-Ser-Leu-Trp-Asn-
 11 Trp-Phe-Asn-Ile-Thr-Asn-Trp-Leu-Trp-Tyr-
 21 Ile-Lys-Cys-Asn-Leu-Ala-Ser-Cys-Asn-Leu-
 31 Arg-Cys-Asp-Ser-Leu-Gly-Leu-Leu-Val-Lys-
 41 Cys-Ala-Gly-Ser-Glu-Cys-Ala-Cys-Gly-Pro-
 === === === === === === === ===
 51 Glu-Pro-Ser-Asp-Ala-Arg-Ser-Glu-Cys-Lys-
 61 Arg-Ser-Ile-Ala-Pro-Asn-Cys-His-Ala-Ala-
 71 Asn

HITS AT: 41-49

MF Unspecified

CI MAN

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAPLUS document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); USES (Uses)

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1

AN 149:304667 CA

TI Preparation of anti-AIDS peptides and their fusion product for prevention HIV infection

IN Wang, Shilong; Shi, Jun; Sun, Xiaoyu; Wang, Mei; He, Jiaojuan; Lin, Nan; Wang, Yuan

PA Tongji University, Peop. Rep. China

SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 23pp.

CODEN: CNXXEV

DT Patent

LA Chinese

CC 14-3 (Mammalian Pathological Biochemistry)

Section cross-reference(s): 3, 13

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	CN 101235083	A	20080806	CN 2007-10037104	20070202
PRAI	CN 2007-10037104		20070202		

AB The invention discloses the peptides and peptide composition against HIV-I, the coding sequences of the peptides and their fusion product, the expression vectors, the manufacturing method and the application thereof. The peptides

and peptide composition are expressed after gene recombination or synthesized with peptide synthesizer. The peptides was able to inhibition of infection of HIV virus into MT-2 cells. The peptide can be used as vaccine for treatment of AIDS.

ST antiAIDS peptide fusion HIV infection vaccine

IT Peptides, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antiAIDS peptides; preparation of anti-AIDS peptides and their fusion product for prevention HIV infection)

IT Fusion proteins (chimeric proteins)

RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL

(Biological study); PREP (Preparation); USES (Uses)

(comprising antiAIDS peptides; preparation of anti-AIDS peptides and their fusion product for prevention HIV infection)

IT AIDS (disease)

Drug delivery systems

Genetic engineering

Human

Human immunodeficiency virus

Vaccines

(preparation of anti-AIDS peptides and their fusion product for prevention HIV infection)

IT Infection

(viral; preparation of anti-AIDS peptides and their fusion product for prevention HIV infection)

IT 909254-31-5P 1050243-25-8P 1050243-28-1P 1050461-44-3P

1050461-45-4P 1050461-46-5P 1050461-47-6P

RL: BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(amino acid sequence; preparation of anti-AIDS peptides and their fusion product for prevention HIV infection)

IT 1050461-42-1 1050461-43-2

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(nucleotide sequence; preparation of anti-AIDS peptides and their fusion product for prevention HIV infection)

IT 1050465-27-4 1050465-28-5 1050465-29-6 1050465-30-9 1050465-31-0

1050465-32-1 1050465-33-2

RL: PRP (Properties)

(unclaimed nucleotide sequence; preparation of anti-AIDS peptides and their fusion product for prevention HIV infection)

=> file hcaplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

43.54

44.38

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-0.75

-0.75

FILE 'HCAPLUS' ENTERED AT 14:57:48 ON 28 SEP 2008

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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FILE COVERS 1907 - 28 Sep 2008 VOL 149 ISS 14

FILE LAST UPDATED: 26 Sep 2008 (20080926/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> 11

```
=> d ibib abs total sqide
'SQIDE' IS NOT A VALID FORMAT FOR FILE 'HCAPLUS'
```

The following are valid formats:

```
ABS ----- GI and AB
ALL ----- BIB, AB, IND, RE
APPS ----- AI, PRAI
BIB ----- AN, plus Bibliographic Data and PI table (default)
CAN ----- List of CA abstract numbers without answer numbers
CBIB ----- AN, plus Compressed Bibliographic Data
CLASS ----- IPC, NCL, ECLA, FTERM
DALL ----- ALL, delimited (end of each field identified)
DMAX ----- MAX, delimited for post-processing
FAM ----- AN, PI and PRAI in table, plus Patent Family data
FBIB ----- AN, BIB, plus Patent FAM
IND ----- Indexing data
IPC ----- International Patent Classifications
MAX ----- ALL, plus Patent FAM, RE
PATS ----- PI, SO
SAM ----- CC, SX, TI, ST, IT
SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;
        SCAN must be entered on the same line as the DISPLAY,
        e.g., D SCAN or DISPLAY SCAN)
STD ----- BIB, CLASS

IABS ----- ABS, indented with text labels
IALL ----- ALL, indented with text labels
IBIB ----- BIB, indented with text labels
IMAX ----- MAX, indented with text labels
ISTD ----- STD, indented with text labels

OBIB ----- AN, plus Bibliographic Data (original)
OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations
SIBIB ----- IBIB, no citations

HIT ----- Fields containing hit terms
HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT)
        containing hit terms
HITRN ----- HIT RN and its text modification
HITSTR ----- HIT RN, its text modification, its CA index name, and
        its structure diagram
HITSEQ ----- HIT RN, its text modification, its CA index name, its
        structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
        its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
        structure diagram, plus NTE and SEQ fields
KWIC ----- Hit term plus 20 words on either side
OCC ----- Number of occurrence of hit term and field in which it occurs
```

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

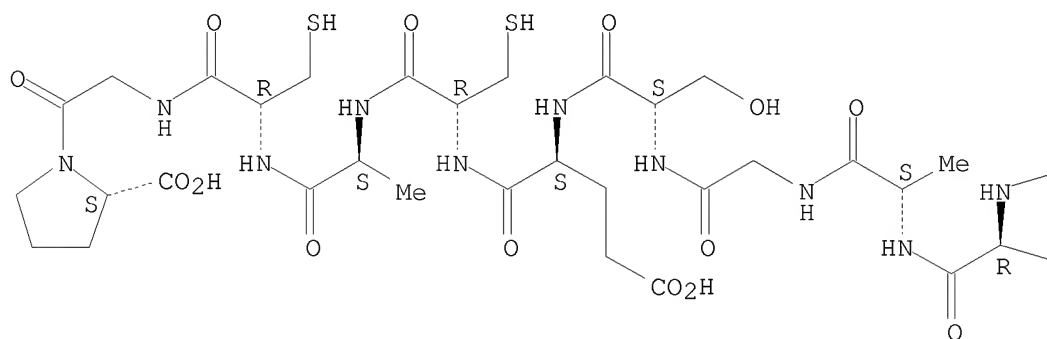
All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.
 ENTER DISPLAY FORMAT (BIB):hitseq

L2 ANSWER 1 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN
 IT 1050243-28-1P 1050461-45-4P 1050461-46-5P
 1050461-47-6P
 RL: BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (amino acid sequence; preparation of anti-AIDS peptides and their fusion product for prevention HIV infection)
 RN 1050243-28-1 HCAPLUS
 CN L-Proline, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-seryl-L-cysteinyl-L-asparaginyl-L-leucyl-L-arginyl-L-cysteinyl-L- α -aspartyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucyl-L-valyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L- α -glutamyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl- (CA INDEX NAME)

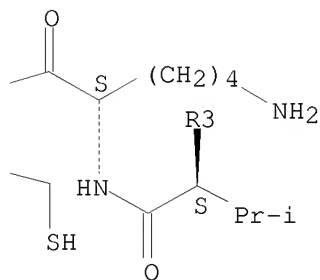
SEQ 1 CNLASCNLRC DSLGLLVKCA GSECACGP

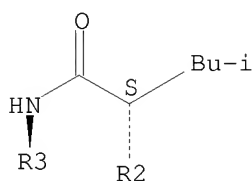
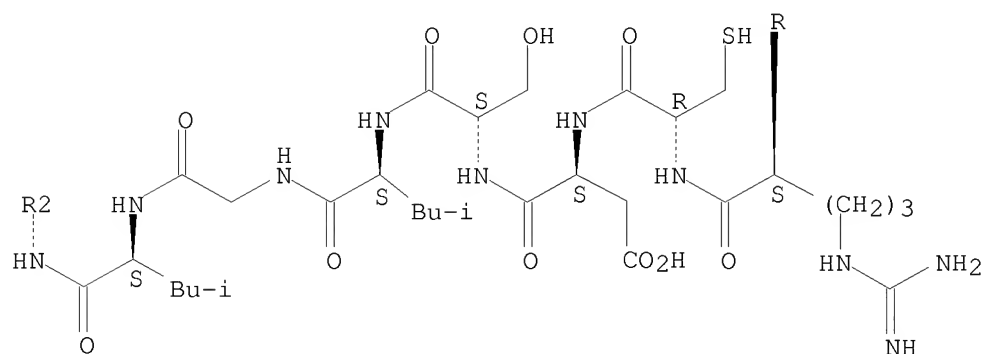
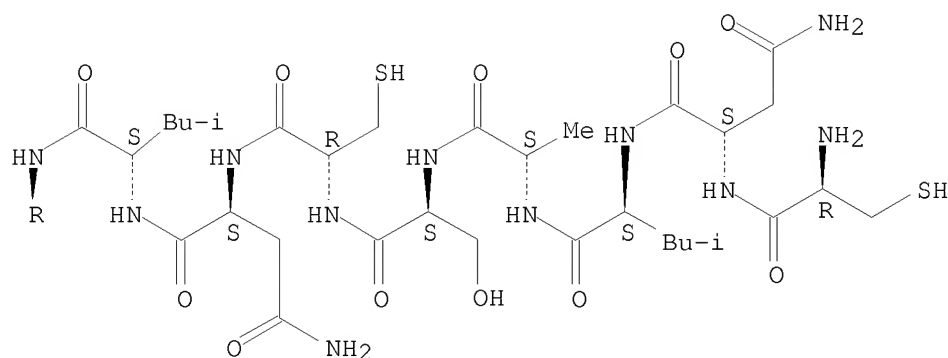
Absolute stereochemistry.

PAGE 1-A



PAGE 1-B





RN 1050461-45-4 HCAPLUS
 CN L-Proline, L- α -glutamyl-L-leucyl-L- α -aspartyl-L-lysyl-L-tryptophyl-L-alanyl-L-seryl-L-leucyl-L-tryptophyl-L-asparaginyl-L-tryptophyl-L-phenylalanyl-L-asparaginyl-L-isoleucyl-L-threonyl-L-asparaginyl-L-tryptophyl-L-leucyl-L-tryptophyl-L-tyrosyl-L-isoleucyl-L-lysyl-L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-seryl-L-cysteinyl-L-asparaginyl-L-leucyl-L-arginyl-L-cysteinyl-L- α -aspartyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucyl-L-valyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L- α -glutamyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl- (CA INDEX NAME)

SEQ 1 ELDKWASLWN WFNITNWLWY IKCNLASCNL RCDSLGLLVK CAGSECACGP

RN 1050461-46-5 HCAPLUS
 CN L-Proline, L- α -glutamyl-L-prolyl-L-seryl-L- α -aspartyl-L-alanyl-

L-arginyl-L-seryl-L- α -glutamyl-L-cysteinyl-L-lysyl-L-arginyl-L-seryl-L-isoleucyl-L-alanyl-L-prolyl-L-asparaginyl-L-cysteinyl-L-histidyl-L-alanyl-L-alanyl-L-asparaginyl-L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-seryl-L-cysteinyl-L-asparaginyl-L-leucyl-L-arginyl-L-cysteinyl-L- α -aspartyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucyl-L-valyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L- α -glutamyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl- (CA INDEX NAME)

SEQ 1 EPSDARSECK RSIAPNCHAA NCNLASCNLR CDSLGLLVKC AGSECACGP

RN 1050461-47-6 HCAPLUS
CN INDEX NAME NOT YET ASSIGNED

SEQ 1 ELDKWASLWN WFNITNWLWY IKCNLASCNL RCDSLGLLVK CAGSECACGP
51 EPSDARSECK RSIAPNCHAA N

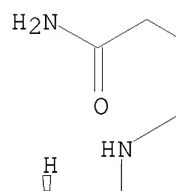
L2 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN
IT 918796-22-2
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(potent anti-HIV compds. with promising activity as microbicides of CD4
mimetic miniproteins)
RN 918796-22-2 HCAPLUS
CN L-Valinamide, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-glutamyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-3-[1,1'-biphenyl]-4-yl-L-alanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1 \rightarrow 18), (5 \rightarrow 23), (9.fwd
arw.25)-tris(disulfide) (CA INDEX NAME)

NTE modified

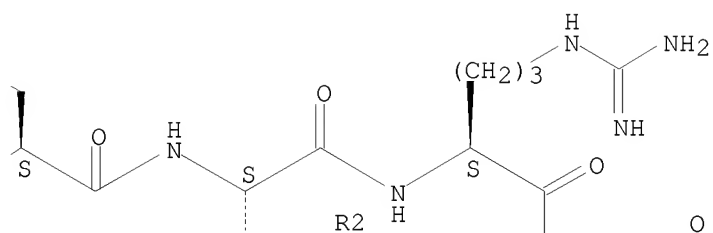
SEQ 1 XNLHFCQLRC KSLGLLGKCA GSFCACV

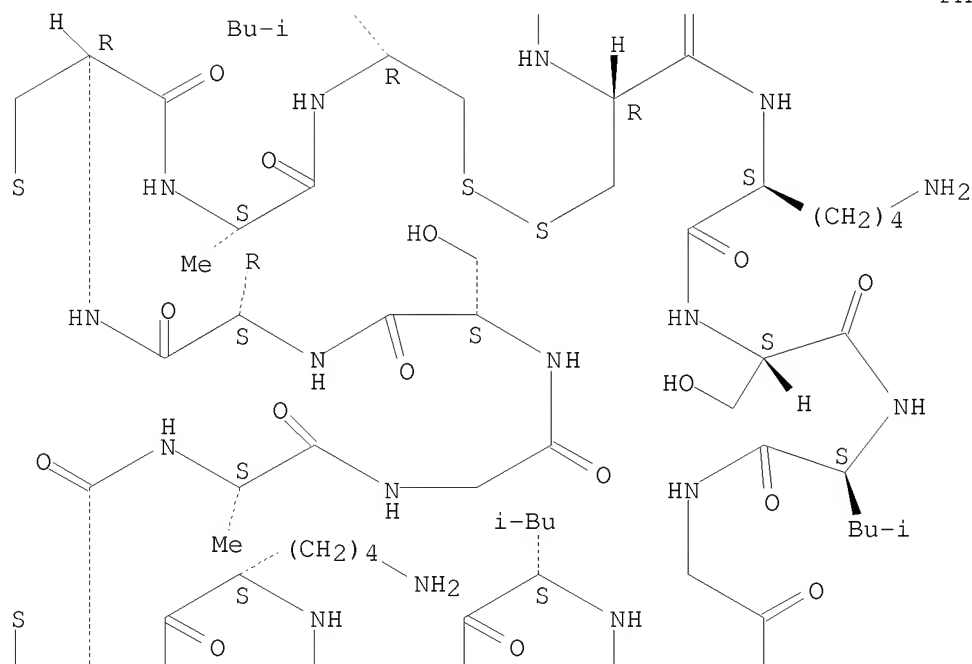
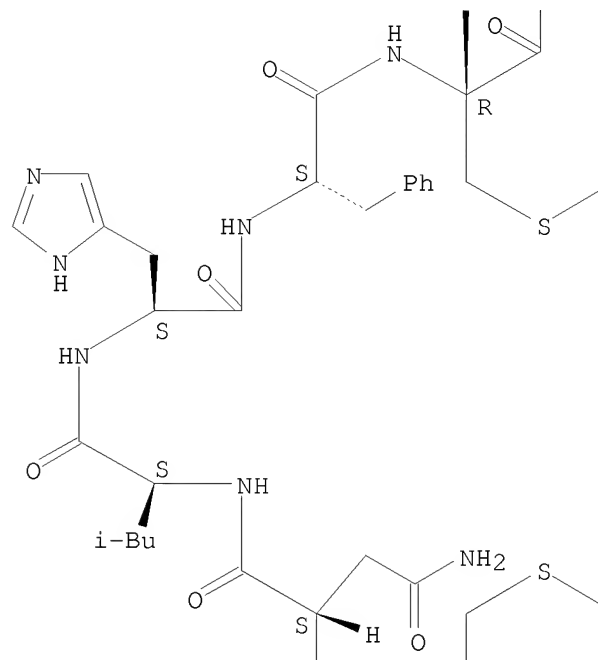
Absolute stereochemistry.

PAGE 1-A

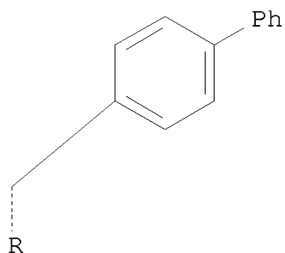
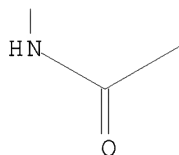


PAGE 1-B

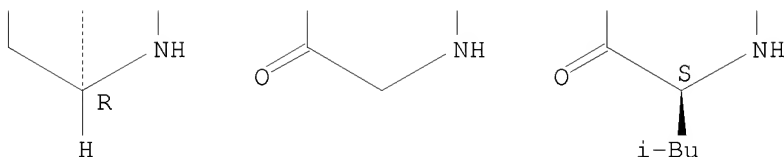




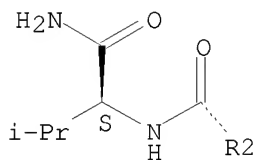
PAGE 3-A



PAGE 3-B



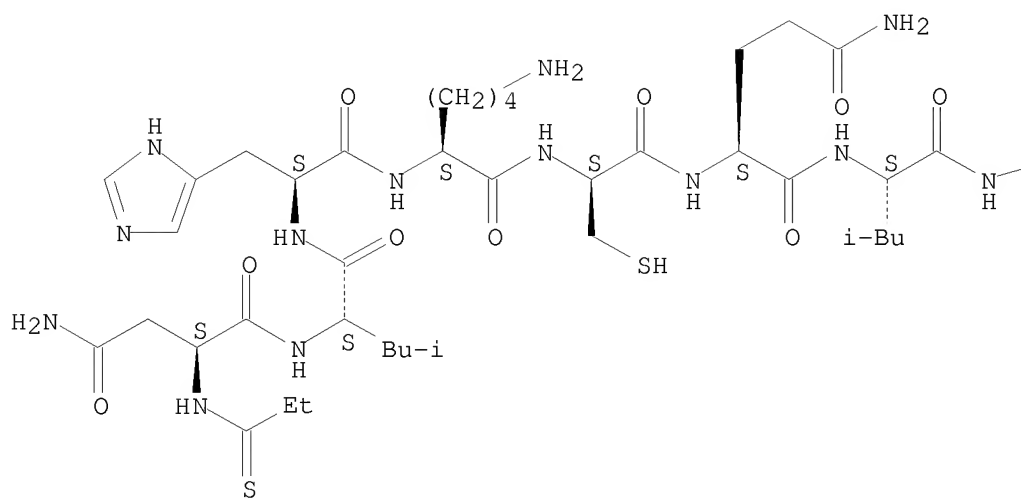
PAGE 4-A



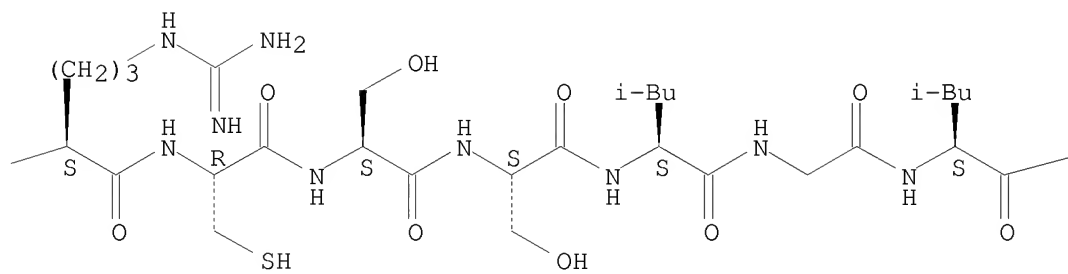
L2 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN
 IT 1005501-32-5DP, biotin-labeled
 RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of CD4 peptide-biotin conjugate capable to induce exposure of
 gp120 epitope CD4i in the presence of antibodies 17b)
 RN 1005501-32-5 HCAPLUS
 CN L-Valinamide, N2-(1-thioxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-
 lysyl-D-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-seryl-L-
 seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-arginyl-L-cysteinyl-L-
 alanylglycyl-L-seryl-3-[1,1'-biphenyl]-4-yl-L-alanyl-L-cysteinyl-L-alanyl-
 L-cysteinyl- (CA INDEX NAME)
 NTE modified
 SEQ 1 NLHKCQLRCS SLGLLGRCAG SFCACV

Absolute stereochemistry.

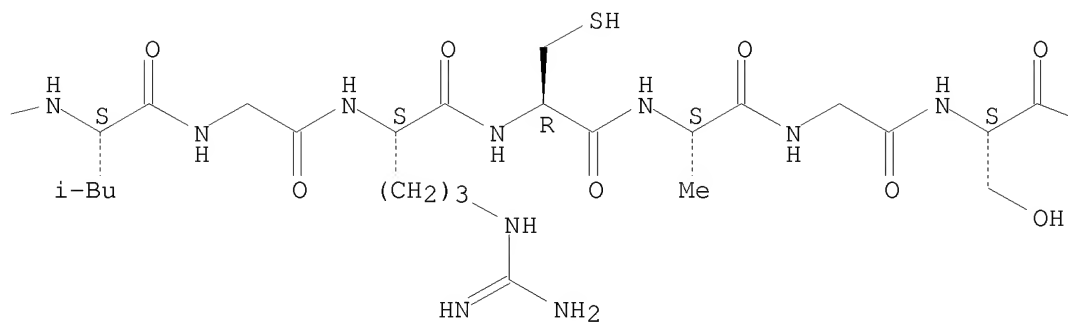
PAGE 1-A

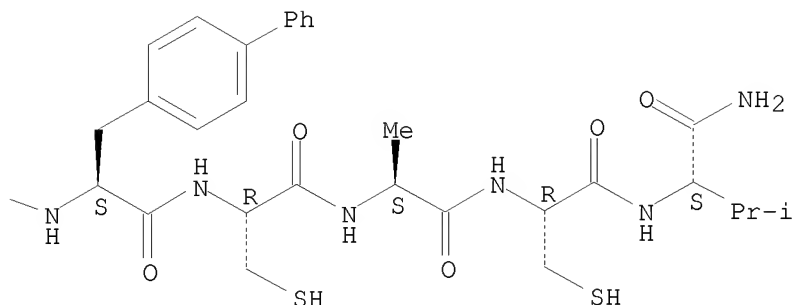


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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of activated CD4 peptides contg. a single lysine residue which is capable of coupling by covalent bonding with sulfanyl-contg. compds. or a modified polyanion contg. a sulfanyl group and their conjugates useful for treating AIDS)

IT 1005501-33-6P

RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of activated CD4 peptides containing a single lysine residue

which

is capable of coupling by covalent bonding with sulfanyl-containing compds. or a modified polyanion containing a sulfanyl group and their conjugates useful for treating AIDS)

RN 1005501-33-6 HCAPLUS

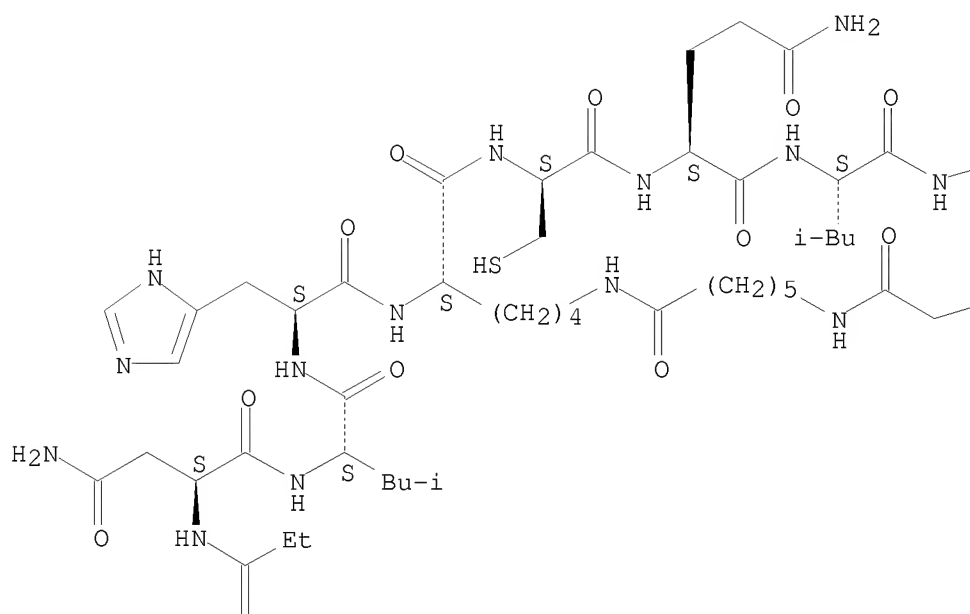
CN L-Valinamide, N2-(1-thioxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-N6-[6-[[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxopropyl]amino]-1-oxohexyl]-L-lysyl-D-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-seryl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-arginyl-L-cysteinyl-L-alanyl-glycyl-L-seryl-3-[1,1'-biphenyl]-4-yl-L-alanyl-L-cysteinyl-L-alanyl-L-cysteinyl- (CA INDEX NAME)

NTE modified (modifications unspecified)

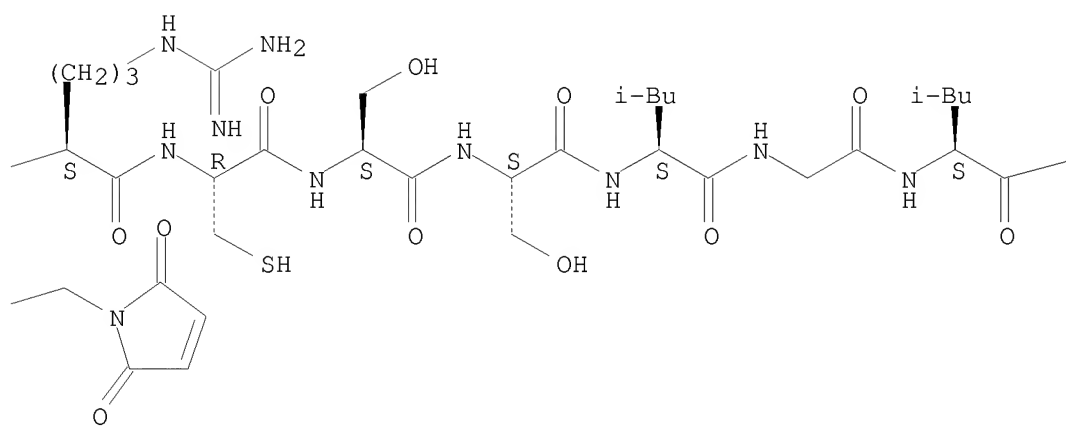
SEQ 1 NLHKCQLRCS SLGLLGRCAG SACACV

Absolute stereochemistry.

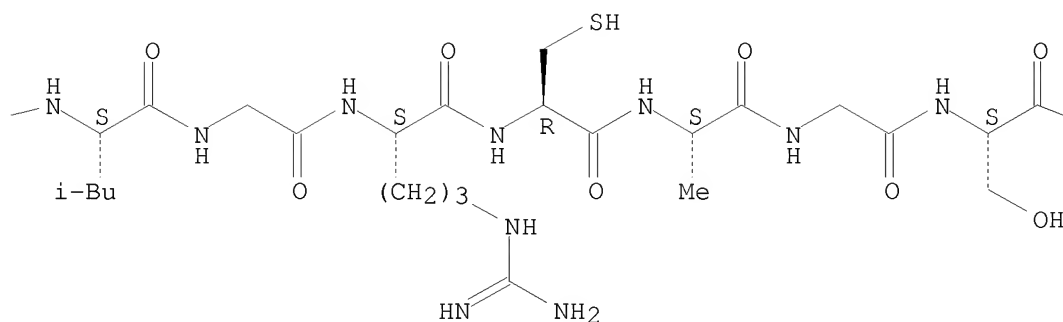
PAGE 1-A



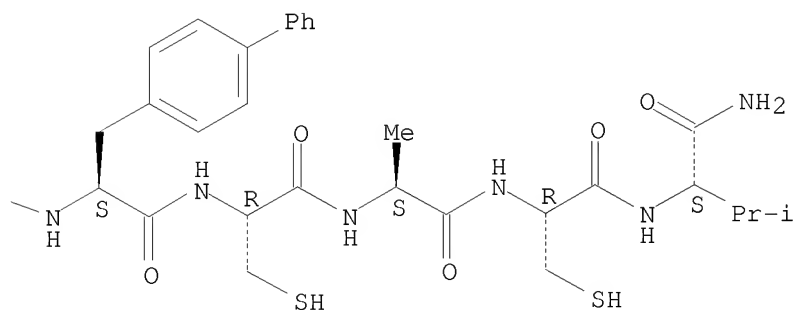
PAGE 1-B



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IT 1005501-34-7P 1005501-36-9P 1005501-37-0P
1005738-20-4P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of activated CD4 peptides containing a single lysine residue

which

is capable of coupling by covalent bonding with sulfanyl-containing compds. or a modified polyanion containing a sulfanyl group and their conjugates useful for treating AIDS)

RN 1005501-34-7 HCAPLUS

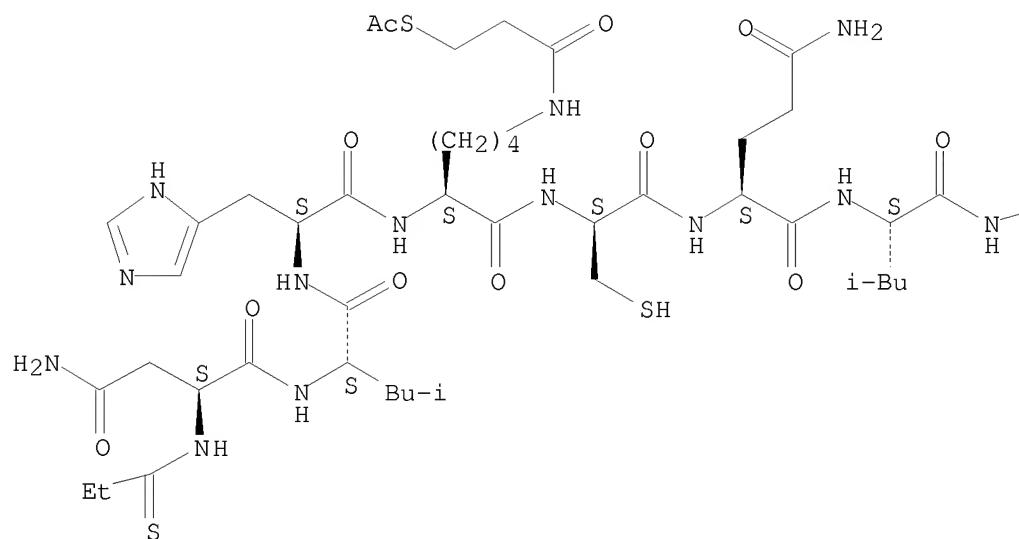
CN L-Valinamide, N2-(1-thioxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-N6-[3-(acetylthio)-1-oxopropyl]-L-lysyl-D-cysteinyl-L-glutamyl-L-leucyl-L-arginyl-L-cysteinyl-L-seryl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-arginyl-L-cysteinyl-L-alanyl-glycyl-L-seryl-3-[1,1'-biphenyl]-4-yl-L-alanyl-L-cysteinyl-L-alanyl-L-cysteinyl- (CA INDEX NAME)

NTE modified

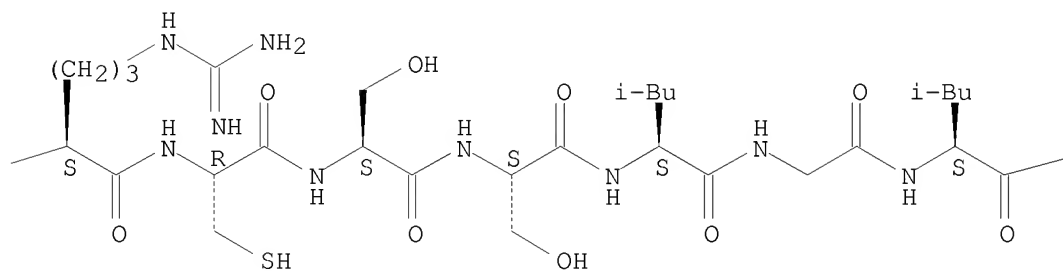
SEQ 1 NLHKCQLRCS SLGLLGRCAG SFCACV

Absolute stereochemistry.

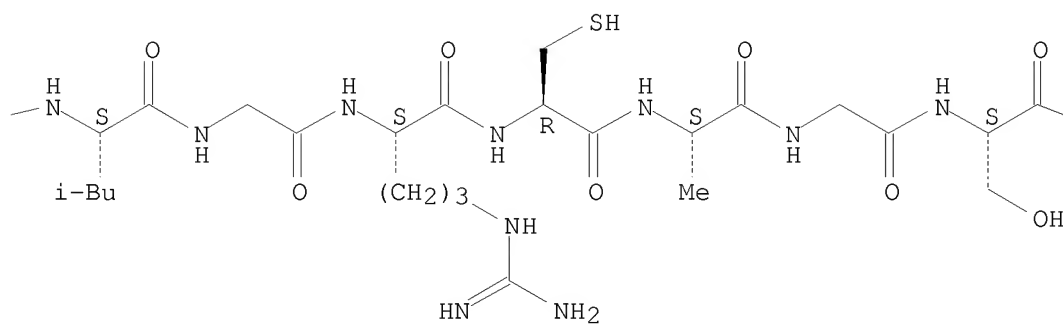
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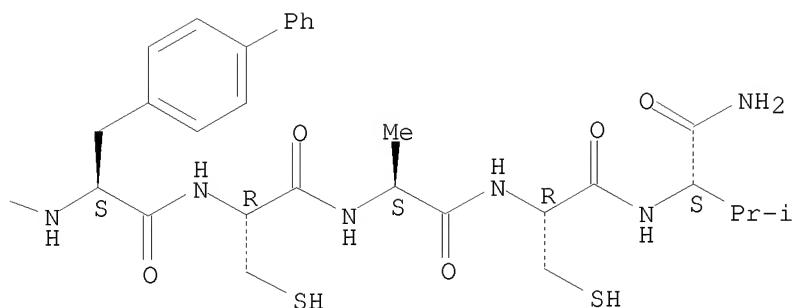


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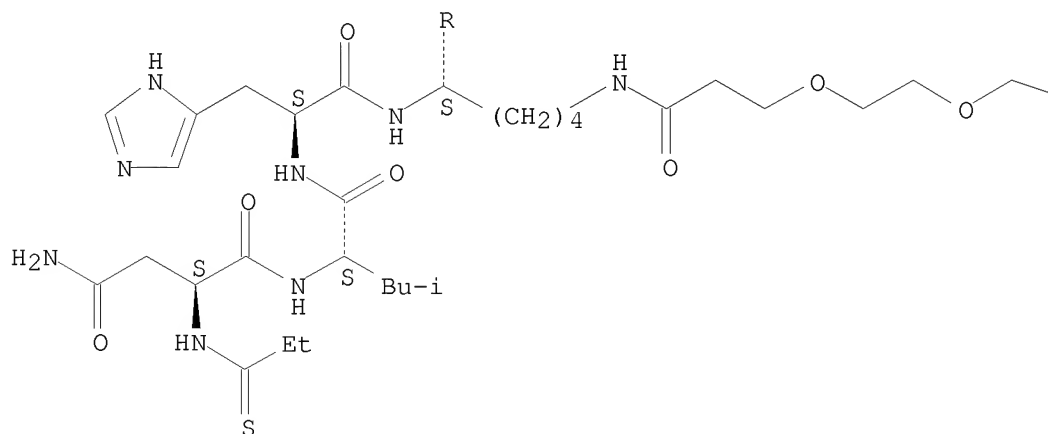
RN 1005501-36-9 HCAPLUS

CN L-Valinamide, N2-(1-thioxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-N6-[3-[2-[2-[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxopropyl]amino]ethoxy]ethoxy]-1-oxopropyl]-L-lysyl-D-cysteiny-L-glutaminy-L-leucyl-L-arginyl-L-cysteiny-L-seryl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-arginyl-L-cysteiny-L-alanylglycyl-L-seryl-3-[1,1'-biphenyl]-4-yl-L-alanyl-L-cysteiny-L-alanyl-L-cysteiny- (CA INDEX NAME)

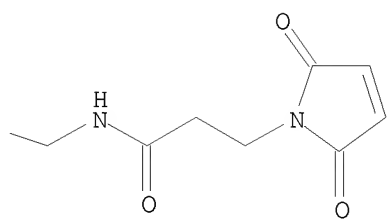
NTE modified (modifications unspecified)

SEQ 1 NLHKQLRCS SLGLLGRCAG SACACV

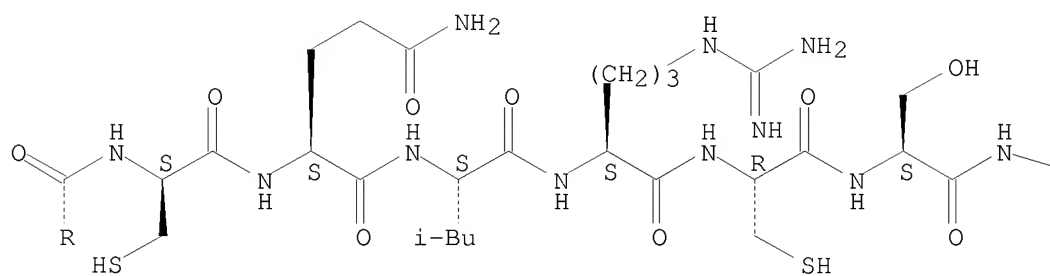
Absolute stereochemistry.



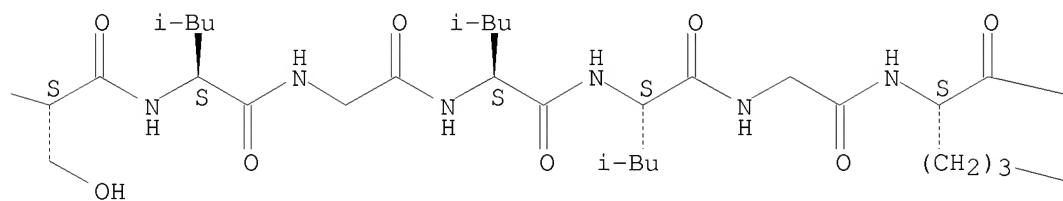
PAGE 1-B



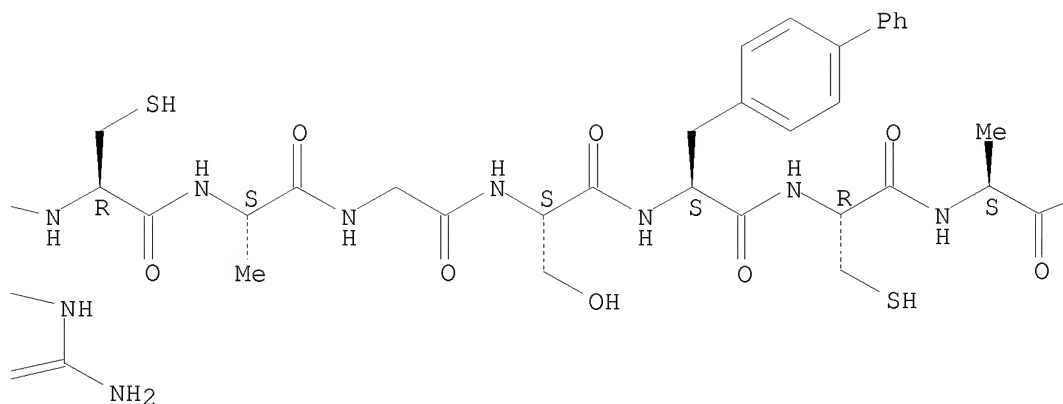
PAGE 2-A



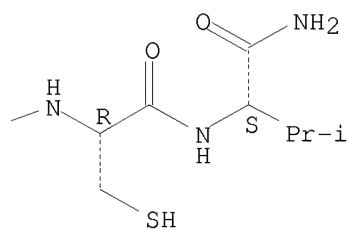
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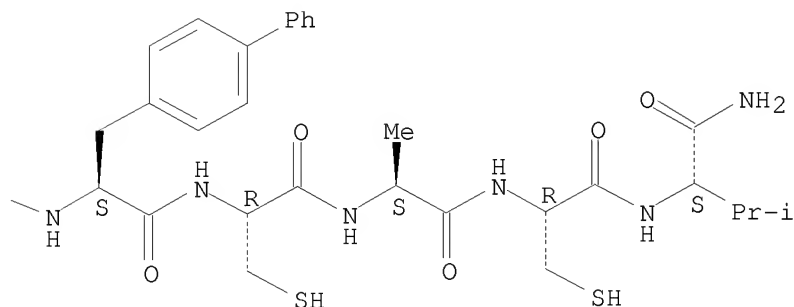
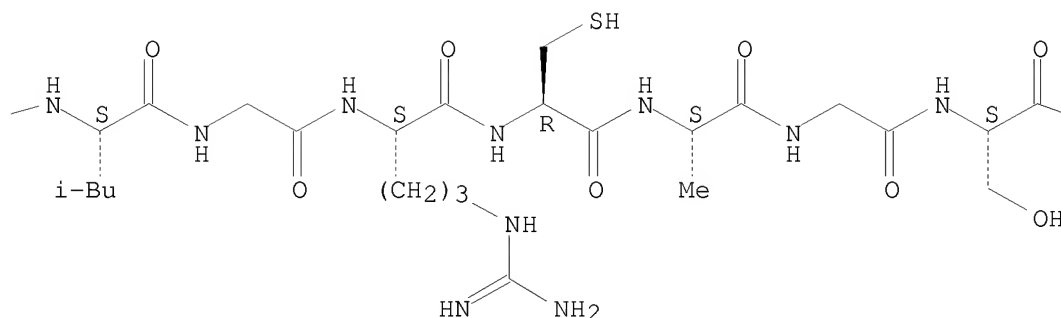


RN 1005501-37-0 HCAPLUS
 CN L-Valinamide, N2-(1-thioxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-N6-[6-
 [[2-(acetylthio)acetyl]amino]-1-oxohexyl]-L-lysyl-D-cysteinyl-L-glutaminyl-
 L-leucyl-L-arginyl-L-cysteinyl-L-seryl-L-seryl-L-leucylglycyl-L-leucyl-L-
 leucylglycyl-L-arginyl-L-cysteinyl-L-alanyl-glycyl-L-seryl-3-[1,1'-
 biphenyl]-4-yl-L-alanyl-L-cysteinyl-L-alanyl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 NLHKQLRCS SLGLLGRCAG SFCACV

Absolute stereochemistry.



RN 1005738-20-4 HCAPLUS
 CN L-Cysteinamide, L-methionyl-L- α -glutamyl-L- α -aspartyl-L-leucyl-L- α -glutamyl-L- α -glutamyl-L-threonyl-L-leucyl-L-phenylalanyl-L- α -glutamyl-L- α -glutamyl-L-phenylalanyl-L- α -glutamyl-L-asparaginyl-L-tyrosyl-L-seryl-L-tyrosyl-L- α -aspartyl-L-leucyl-L- α -aspartyl-L-tyrosyl-L-tyrosyl-L-seryl-L-leucyl-L- α -glutamyl-L-seryl-, (27 \rightarrow 4')-disulfide with N2-(1-thioxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-N6-(3-mercapto-1-oxopropyl)-L-lysyl-D-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-seryl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-arginyl-L-cysteinyl-L-alanyl-glycyl-L-seryl-3-[1,1'-biphenyl]-4-yl-L-alanyl-L-cysteinyl-L-alanyl-L-cysteinyl-L-valinamide (CA

INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 MEDLEETLFE EFENYSYDLD YYSLESC
1 NLHKCQLRCS SLGLLGRCAG SACACV

L2 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

IT 1002724-68-6P

RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(CD4 mimic peptides or multivalent compds. comprising co-receptor-gp120 binding and/or virus-cell fusion inhibitors for use as anti-HIV therapeutics, diagnostics or vaccines)

RN 1002724-68-6 HCAPLUS

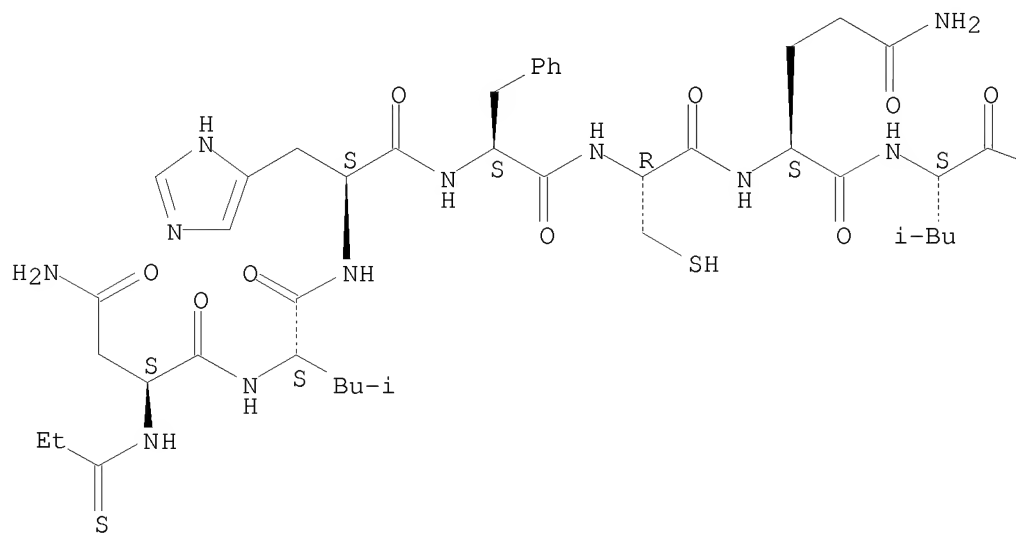
CN L-Valine, N2-(1-thioxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-3-[1,1'-biphenyl]-4-yl-L-alanyl-L-cysteinyl-L-alanyl-L-cysteinyl- (CA INDEX NAME)

NTE modified (modifications unspecified)

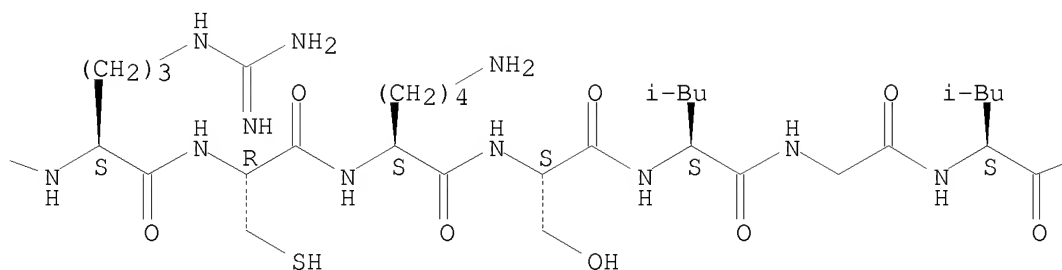
SEQ 1 NLHFCQLRCK SLGLLGKCAG SFCACV

Absolute stereochemistry.

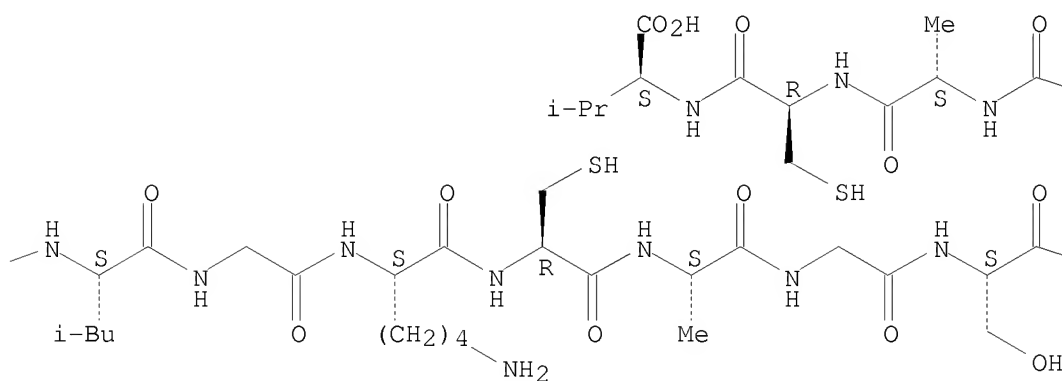
PAGE 1-A



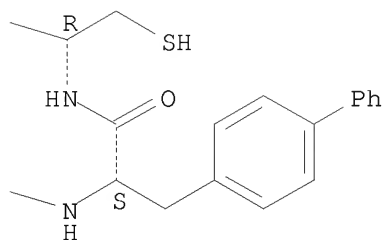
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L2 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

IT 491596-19-1

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
 PRP (Properties); BIOL (Biological study)
 (CD4 mimic peptides for anti-HIV therapeutic or vaccine compns.)

RN 491596-19-1 HCAPLUS

CN L-Valinamide, N2-(1-thioxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-

phenylalanyl-L-cysteinyl-L-glutaminy-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanyl-glycyl-L-seryl-3-[1,1'-biphenyl]-4-yl-L-alanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (5→23), (9→25)-bis(disulfide) (CA INDEX NAME)

NTE modified

SEQ 1 NLHFCQLRCK SLGLLGKCAG SFCACV

IT 858280-93-0

RL: PAC (Pharmacological activity); PRP (Properties); BIOL (Biological study)

(CD4 mimic peptides for anti-HIV therapeutic or vaccine compns.)

RN 858280-93-0 HCAPLUS

CN L-Valinamide, N2-(1-thioxopropyl)-L-asparaginy-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-glutaminy-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanyl-glycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (5→23), (9→25)-bis(disulfide) (CA INDEX NAME)

NTE modified

SEQ 1 NLHFCQLRCK SLGLLGKCAG SFCACV

IT 1000096-91-2

RL: PRP (Properties)

(unclaimed protein sequence; cD4 mimic peptides and use for anti-HIV therapeutic or vaccine compns.)

RN 1000096-91-2 HCAPLUS

CN Peptide, (Xaa-Asn-Leu-His-Phe-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (CA INDEX NAME)

SEQ 1 XNLHFCQLRC KSLGLLGKCA GSXCACV

L2 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

IT 944044-42-2

RL: PAC (Pharmacological activity); BIOL (Biological study)

(preparation of trivalent CD4-mimetic miniproteins using triazacyclododecane, Kemp's acid or trimesic acid as templates to ligate CD4M9 at C-terminal using spacers, and their anti-HIV activity)

RN 944044-42-2 HCAPLUS

CN L-Cysteinamide, 31S,31'S-[(6,17-dioxo-10,13-dioxo-7,16-diazadocosane-1,22-diyl)bis(2,5-dioxo-1,3-pyrrolidinediyl)]bis[L-cysteinyl-L-asparaginy-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminy-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanyl-glycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-, cyclic (1→19), (1'→19'), (6→24), (6'→24'), (10→26), (10'→26')-hexakis(disulfide) (CA INDEX NAME)

NTE multichain

modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

IT 736980-71-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of trivalent CD4-mimetic miniproteins using triazacyclododecane, Kemp's acid or trimesic acid as templates to ligate CD4M9 at C-terminal using spacers, and their anti-HIV activity)

RN 736980-71-5 HCAPLUS

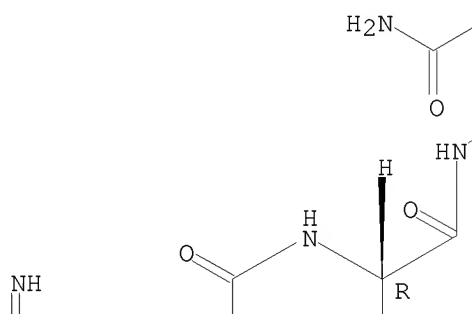
CN L-Cysteinamide, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-, cyclic (1→19), (6→24), (10→26)-tris(disulfide) (CA INDEX NAME)

NTE modified

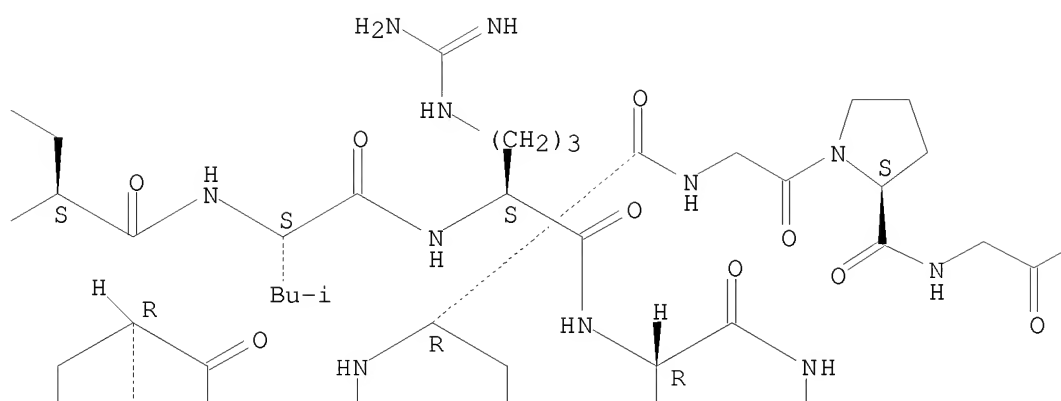
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

Absolute stereochemistry.

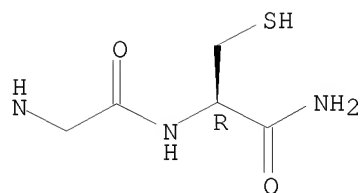
PAGE 1-A

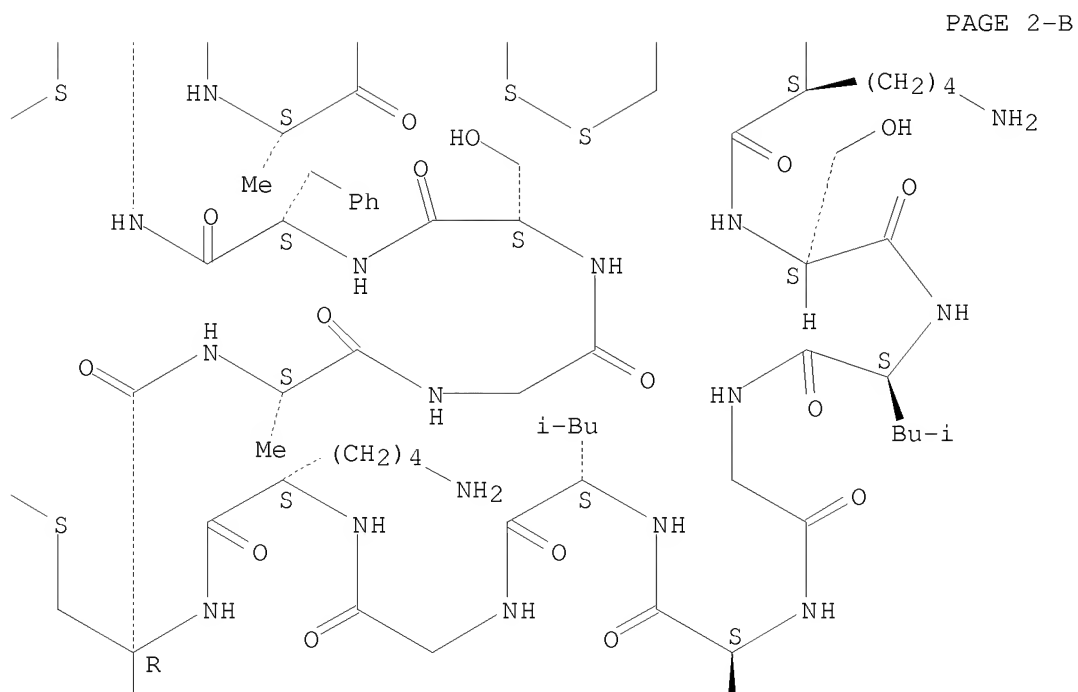
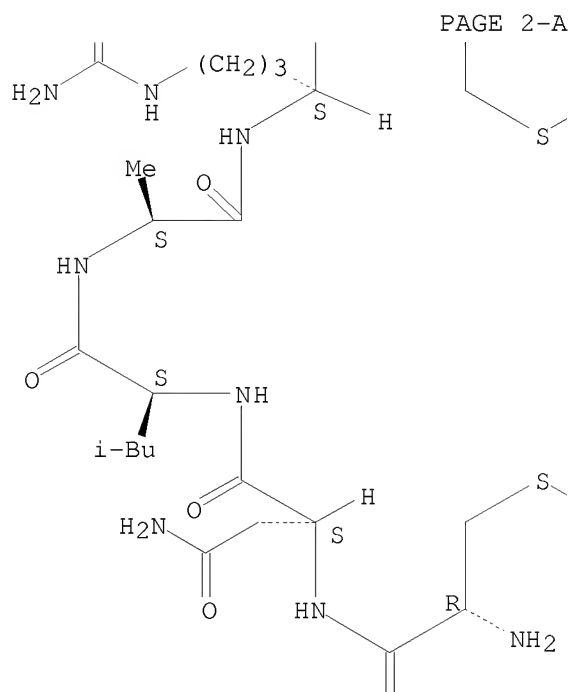


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H

i-Bu

IT 944044-34-2P 944044-35-3P 944044-36-4P
 944044-37-5P 944044-38-6P 944044-39-7P
 944044-40-0P 944044-41-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of trivalent CD4-mimetic miniproteins using
 triazacyclododecane, Kemp's acid or trimesic acid as templates to
 ligate CD4M9 at C-terminal using spacers, and their anti-HIV activity)

RN 944044-34-2 HCAPLUS
 CN L-Cysteinamide, 31S,31'S31''S-[1,5,9-triazacyclododecane-1,5,9-
 triyltris[(3-oxo-3,1-propanediyl)(2,5-dioxo-1,3-pyrrolidinediyl)]]tris[L-
 cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-
 glutamyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-
 leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-
 phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-,
 cyclic (1→19), (1'→19'), (1''→19''), (6→24), (6'.f
 wdarw.24'), (6''→24''), (10→26), (10'→26'), (10''→
 26'')-nonakis(disulfide) (CA INDEX NAME)

NTE multichain
 modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

RN 944044-35-3 HCAPLUS
 CN L-Cysteinamide, 31S,31'S31''S-[1,5,9-triazacyclododecane-1,5,9-
 triyltris[(11-oxo-11,1-undecanediyl)(2,5-dioxo-1,3-
 pyrrolidinediyl)]]tris[L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-
 arginyl-L-cysteinyl-L-glutamyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-
 seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-
 alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-
 L-prolylglycylglycyl-, cyclic (1→19), (1'→19'), (1''→19
 '''), (6→24), (6'→24'), (6''→24''), (10→26), (10'.fw
 darw.26'), (10''→26'')-nonakis(disulfide) (CA INDEX NAME)

NTE multichain
 modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

RN 944044-36-4 HCAPLUS
 CN L-Cysteinamide, 31S,31'S31''S-[1,5,9-triazacyclododecane-1,5,9-
 triyltris[(3-oxo-3,1-propanediyl)oxy-2,1-ethanediylloxy-2,1-
 ethanediylimino(3-oxo-3,1-propanediyl)(2,5-dioxo-1,3-
 pyrrolidinediyl)]]tris[L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-
 arginyl-L-cysteinyl-L-glutamyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-

seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-, cyclic (1→19), (1'→19'), (1''→19'), (6→24), (6'→24'), (6''→24'), (10→26), (10'.fw darw.26'), (10''→26'')-nonakis(disulfide) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

RN 944044-37-5 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), $\alpha, \alpha', \alpha''$ -[1,5,9-triazacyclododecane-1,5,9-triyltris(3-oxo-3,1-propanediyl)]tris[ω -hydroxy-, 31,31',31''-triether with L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-S-[1-[3-[(2-hydroxyethyl)amino]-3-oxopropyl]-2,5-dioxo-3-pyrrolidiny]]-L-cysteinamide cyclic (1→19), (1'→19'), (1''→19'), (6→24), (6'→24'), (6''→24'), (10.fwda rw.26'), (10''→26''), (10''→26'')-nonakis(disulfide) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

RN 944044-38-6 HCAPLUS
CN L-Cysteinamide, 31S,31'S31''S-[[$(1\alpha, 3\alpha, 5\alpha)$ -1,3,5-trimethyl-1,3,5-cyclohexanetriyl]tris[carbonylimino-2,1-ethanediyl(2,5-dioxo-1,3-pyrrolidinediyl)]]tris[L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-, cyclic (1→19), (1'→19'), (1''→19'), (6→24), (6'→24'), (6''→24'), (10→26), (10'.fw darw.26'), (10''→26'')-nonakis(disulfide) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

RN 944044-39-7 HCAPLUS
CN L-Cysteinamide, 31S,31'S31''S-[[(1 α , 3 α , 5 α)-1,3,5-trimethyl-1,3,5-cyclohexanetriyl]tris[carbonylimino-2,1-ethanediyl(2,5-dioxo-1,3-pyrrolidinediyl)]]tris[L-cysteiny-L-asparaginy-L-leucyl-L-alanyl-L-arginyl-L-cysteiny-L-glutaminy-L-leucyl-L-arginyl-L-cysteiny-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteiny-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteiny-L-alanyl-L-cysteinyglycyl-L-prolylglycylglycyl-, cyclic (1 \rightarrow 19), (1' \rightarrow 19'), (1'' \rightarrow 19''), (6 \rightarrow 24), (6' \rightarrow 24'), (6'' \rightarrow 24''), (10 \rightarrow 26), (10' \rightarrow 26'), (10'' \rightarrow 26'')-nonakis(disulfide) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

RN 944044-40-0 HCAPLUS
CN L-Cysteinamide, 31S,31'S31''S-[[(1 α , 3 α , 5 α)-1,3,5-trimethyl-1,3,5-cyclohexanetriyl]tris[carbonylimino-2,1-ethanediyl(2,5-dioxo-1,3-pyrrolidinediyl)]]tris[L-cysteiny-L-asparaginy-L-leucyl-L-alanyl-L-arginyl-L-cysteiny-L-glutaminy-L-leucyl-L-arginyl-L-cysteiny-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteiny-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteiny-L-alanyl-L-cysteinyglycyl-L-prolylglycylglycyl-, cyclic (1 \rightarrow 19), (1' \rightarrow 19'), (1'' \rightarrow 19''), (6 \rightarrow 24), (6'.fwdarw.24'), (6'' \rightarrow 24''), (10 \rightarrow 26), (10' \rightarrow 26'), (10'' \rightarrow 26'')-nonakis(disulfide) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

RN 944044-41-1 HCAPLUS
CN L-Cysteinamide, 31S,31'S31''S-[1,3,5-benzenetriyltris[carbonylimino-2,1-ethanediyl(2,5-dioxo-1,3-pyrrolidinediyl)]]tris[L-cysteiny-L-asparaginy-L-leucyl-L-alanyl-L-arginyl-L-cysteiny-L-glutaminy-L-leucyl-L-arginyl-L-cysteiny-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteiny-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteiny-L-alanyl-L-cysteinyglycyl-L-prolylglycylglycyl-, cyclic (1 \rightarrow 19), (1' \rightarrow 19'), (1'' \rightarrow 19''), (6 \rightarrow 24), (6' \rightarrow 24'), (6'' \rightarrow 24''), (10 \rightarrow 26), (10'.fwdarw.26'), (10'' \rightarrow 26'')-nonakis(disulfide) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

L2 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

IT 927453-22-3P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
(Biological study); PREP (Preparation); USES (Uses)
(amino acid sequence; DNA vaccines encoding chimeric protein of HIV
gp120 envelope protein and CD4 D1D2 domains for preventing and treating
viral infection)

RN 927453-22-3 HCAPLUS

CN Envelope protein gp120env (Human immunodeficiency virus strain BaLn
substitution deriv.) fusion protein with peptide (synthetic linker) fusion
protein with CD4 (antigen) (Human D1 plus D2 domain mimicking fragment)
(CA INDEX NAME)

SEQ 1 MPMGSLQPLA TLYLLGMLVA SCLGNAEEKL WVTVYYGVPV WKEATTTLFC
 51 ASDRKAYDTE VHNVWATHAC VPTDPNPQEV ELKNVTENFN MWKNNMVEQM
 101 HEDIISLWDQ SLKPCVKLTP LCVTLNCTDL RNATNGNDTN TTSSSRGMVG
 151 GGEMKNCSFN ITTNIRGKVQ KEYALFYKLD IAPIDNNSNN RYRLISCNTS
 201 VITQACPKVS FEPIPIHYCA PAGFAILKCK DKKFNGKGPC TNVSTVQCTH
 251 GIRPVVSTQL LLNGSLAEEE VVIRSANFAD NAKVIIIVQLN ESVEINCTRP
 301 NNNTRKSIHI GPGRAFYTIG EIIGDIRQAH CNLSRAKWND TLNKIVIKLR
 351 EQFGNKTIVF KHSSGGDPEI VTHSFNCGGE FFYCNSTQLF NSTWNVTEES
 401 NNTVENNTIT LPCRIKQIIN MWQEVGRAMY APPIRGQIRC SSNITGLLLT
 451 RDGGPEDNKT EVFRPGGGDM RDNWRSELYK YKVVKIEPLG VAPTKAKRRV
 501 VQREKTGSSG GGGSGSGGGG SGGGAAACNL ARCQLRCKSL GLLGKCAGSF
 551 CACGPX

IT 326494-28-4

RL: PRP (Properties)
(unclaimed sequence; dNA vaccines encoding chimeric protein of viral
coat protein and CD4 virus receptor for preventing and treating viral
infection)

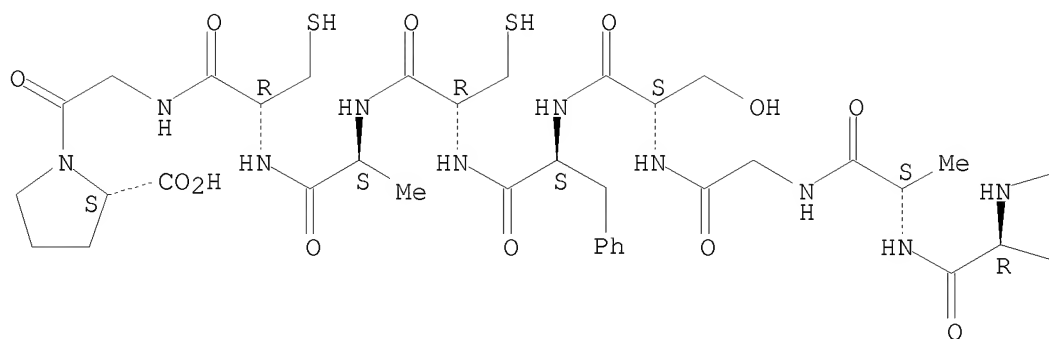
RN 326494-28-4 HCAPLUS

CN L-Proline, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-
cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-
leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-
seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl- (CA INDEX
NAME)

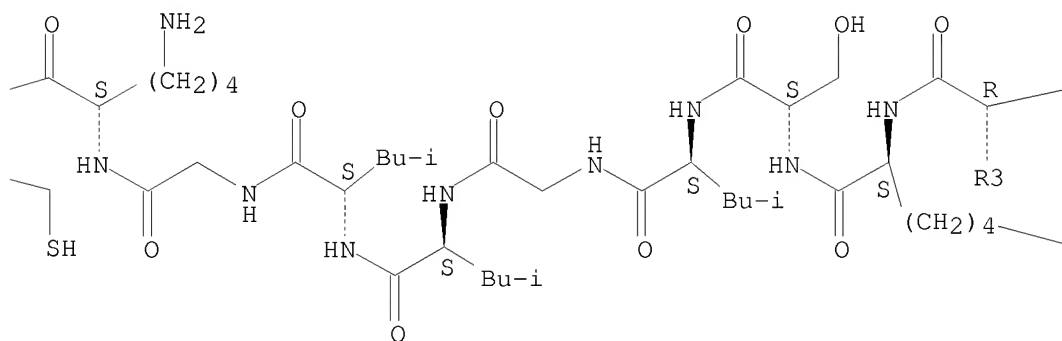
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

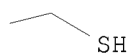
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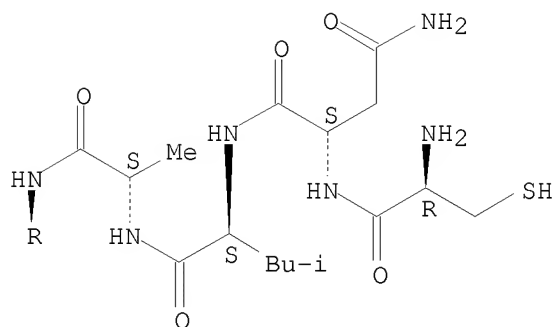
PAGE 1-B



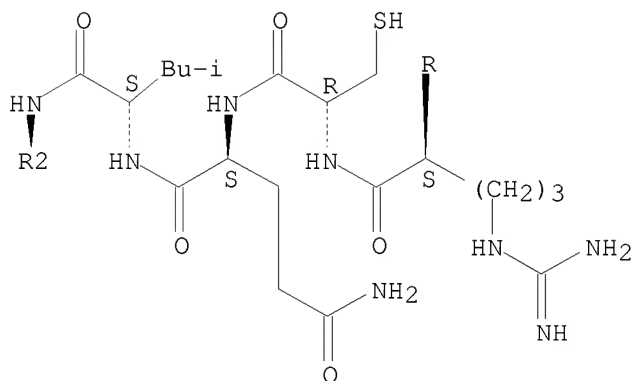
PAGE 1-C



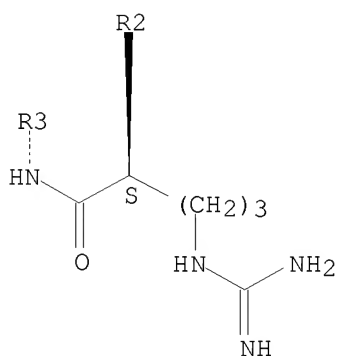
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L2 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN
IT 922196-89-2P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)
(amino acid sequence; chimeric polypeptides comprising viral coat
protein epitope and virus receptor protein mimetic in combination with
G1 cytostatic agents for treating viral infection)

RN 922196-89-2 HCAPLUS
 CN Protein FLSC-R/T CD4M9 [506-threonine] (synthetic human immunodeficiency virus 1 gp120-CD4 D1D2 domain-myc tag mutant-containing) (CA INDEX NAME)

SEQ 1 MPMGSLQPLA TLYLLGMLVA SCLGNAEEKL WVTVYYGVPV WKEATTTTLC
 51 ASDRKAYDTE VHNVWATHAC VPTDPNPQEV ELKNVTENFN MWKNNMVEQM
 101 HEDIISLWDQ SLKPCVKLTP LCVTLNCTDL RNATNGNDTN TTSSSRGMVG
 151 GGEMKNCSFN ITTNIRGKVQ KEYALFYKLD IAPIDNNSNN RYRLISCNTS
 201 VITQACPKVS FEPIPIHYCA PAGFAILKCK DKKFNGKGPC TNVSTVQCTH
 251 GIRPVVSTQL LLNGSLAEEE VVIRSANFAD NAKVIIVQLN ESVEINCTRP
 301 NNNTRKSIHI GPGRAFYTIG EIIGDIRQAH CNLSRAKWND TLNKIVIKLR
 351 EQFGNKTIVF KHSSGGDPEI VTHSFNCGGE FFYCNSTQLF NSTWNVTEES
 401 NNTVENNTIT LPCRIKQIIN MWQEVGRAMY APPIRGQIRC SSNITGLLLT
 451 RDGGPEDNKT EVFRPGGGDM RDNWRSELYK YKVVKIEPLG VAPTKAKRRV
 501 VQREKTGSSG GGGSGSGGGG SGGGAAACNL ARCQLRCKSL GLLGKCAGSF
 551 CACGPX

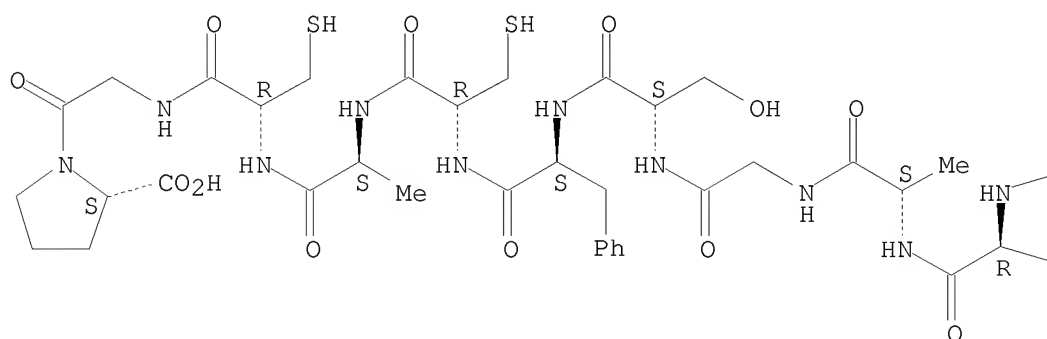
IT 326494-28-4
 RL: PRP (Properties)
 (unclaimed sequence; chimeric polypeptides comprising viral coat protein epitope and virus receptor protein mimetic in combination with G1 cytostatic agents for treating viral infection)

RN 326494-28-4 HCAPLUS
 CN L-Proline, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl- (CA INDEX NAME)

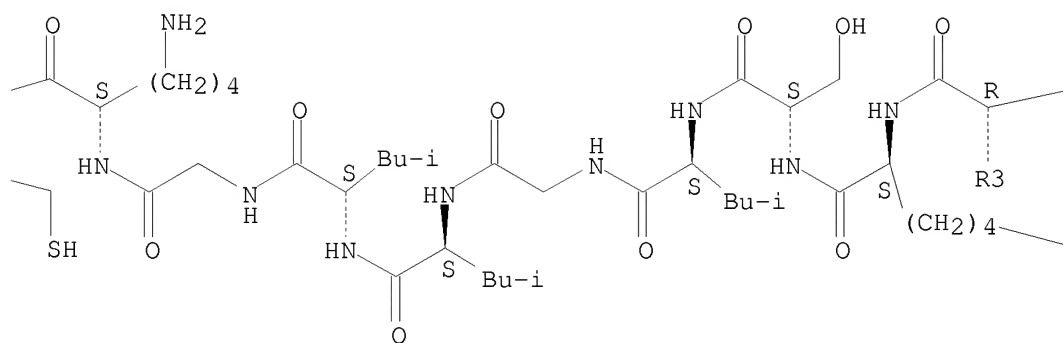
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

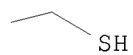
PAGE 1-A



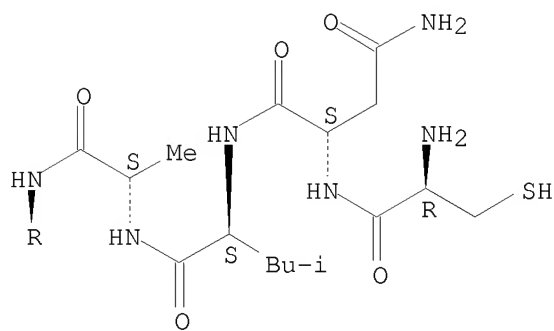
PAGE 1-B

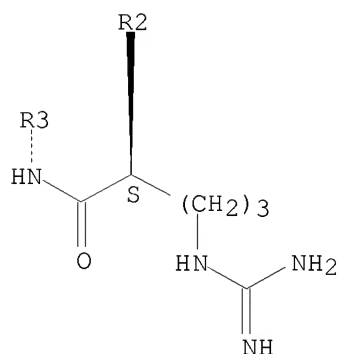
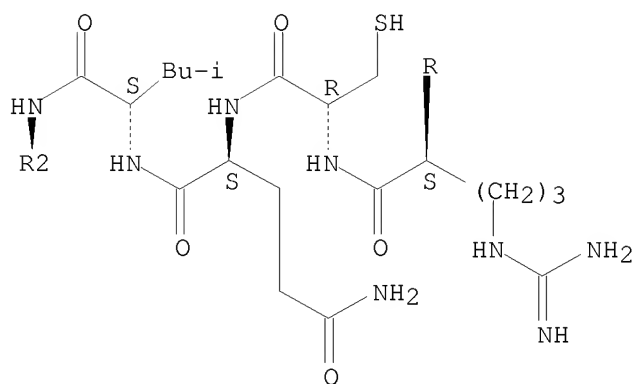


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L2 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

IT 918796-22-2P

RL: BPN (Biosynthetic preparation); PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(CD4M33; constrained HIV envelope-based immunogen that simultaneously presents receptor and coreceptor binding sites)

RN 918796-22-2 HCAPLUS

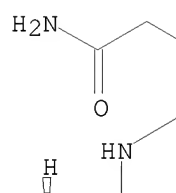
CN L-Valinamide, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-3-[1,1'-biphenyl]-4-yl-L-alanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9.fwd arw.25)-tris(disulfide) (CA INDEX NAME)

NTE modified

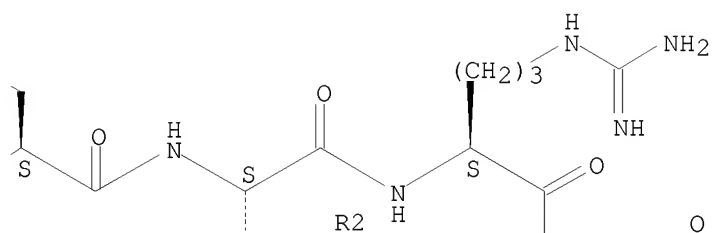
SEQ 1 XNLHFCQLRC KSLGLLGKCA GSFCACV

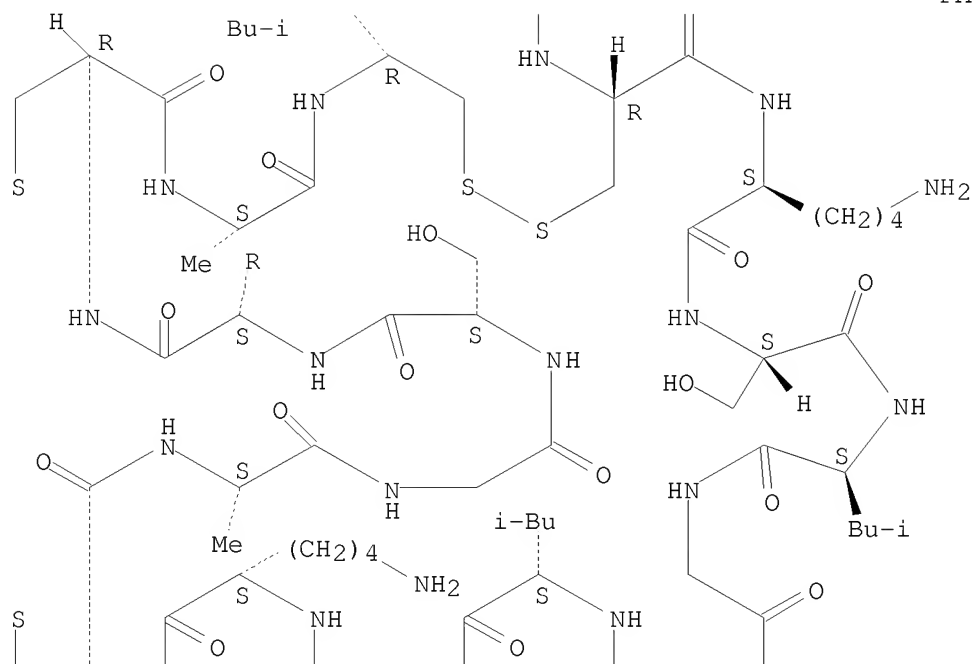
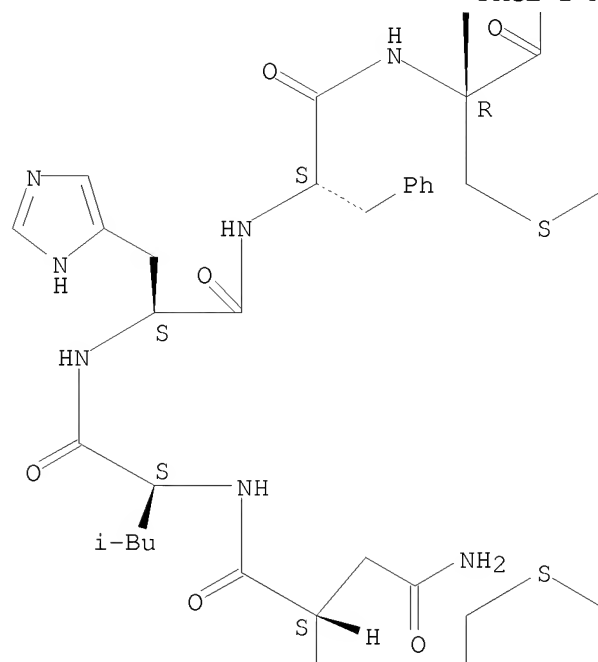
Absolute stereochemistry.

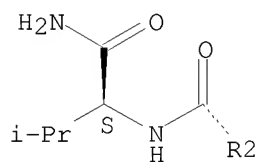
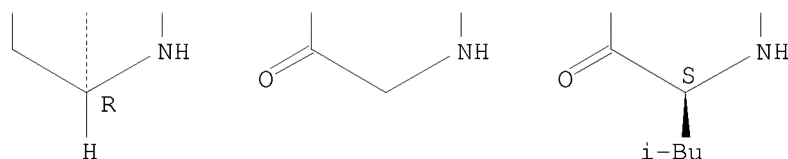
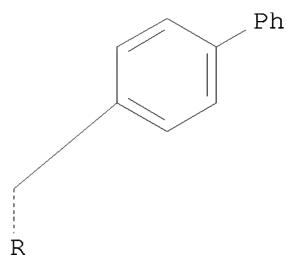
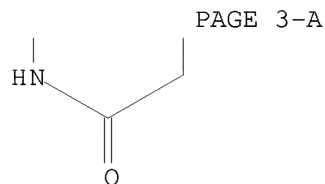
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IT 918796-21-1P
 RL: BPN (Biosynthetic preparation); PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (CD4M9; constrained HIV envelope-based immunogen that simultaneously presents receptor and coreceptor binding sites)

RN 918796-21-1 HCAPLUS

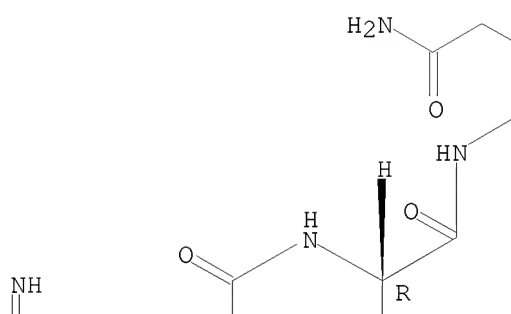
CN L-Prolinamide, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-, cyclic (1→19), (6→24), (10→26)-tris(disulfide) (CA INDEX NAME)

NTE modified

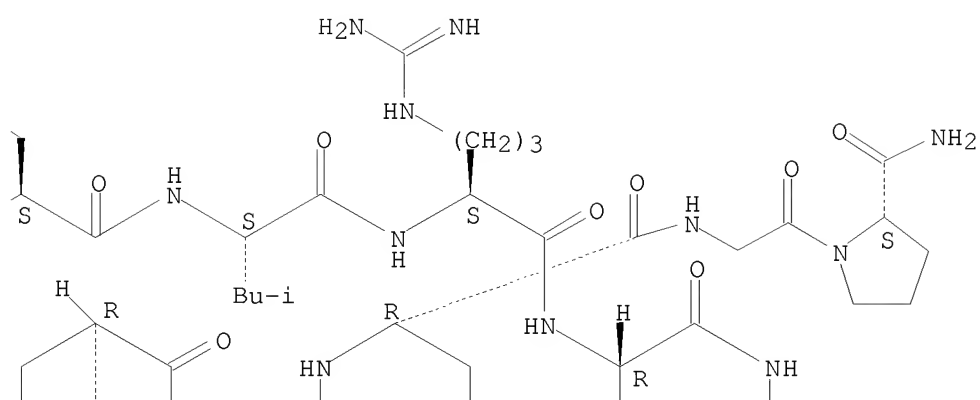
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

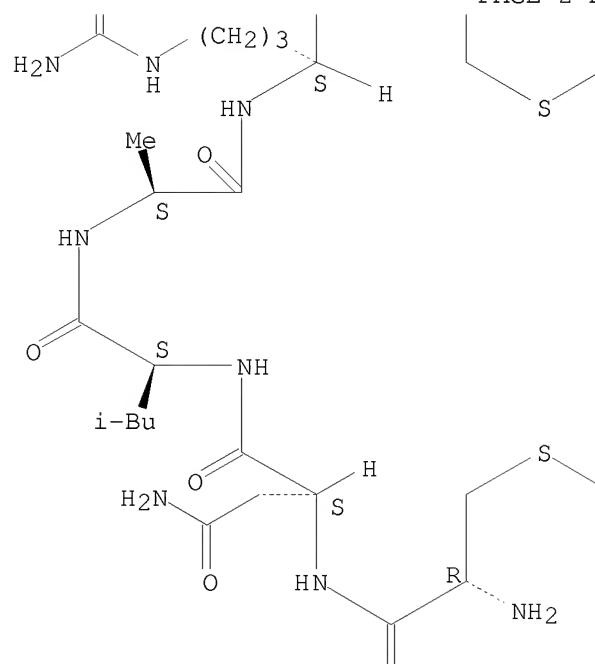
PAGE 1-A



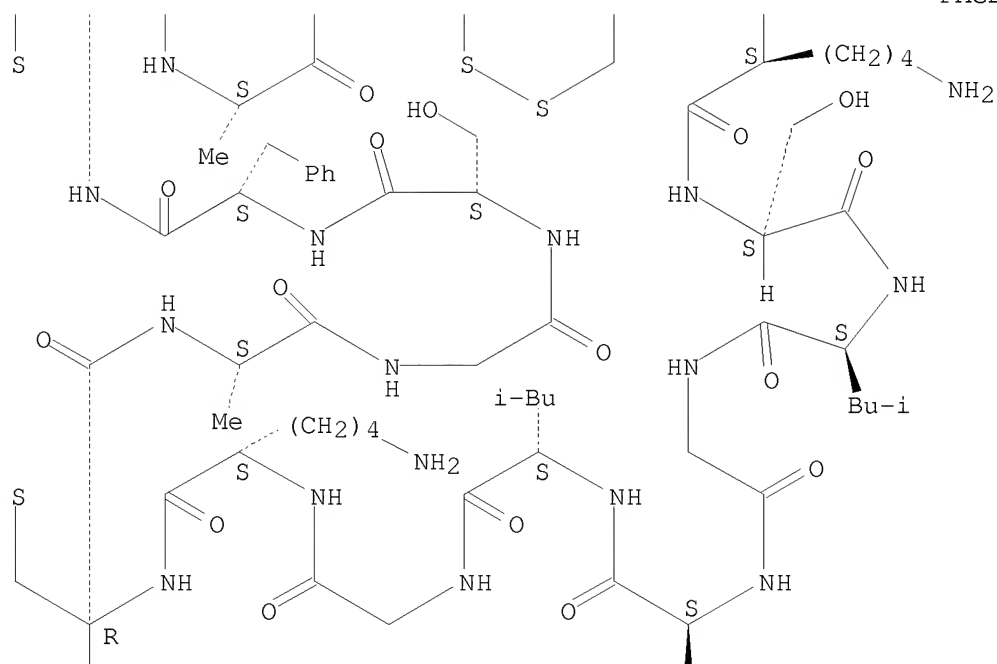
PAGE 1-B



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O

H

i-Bu

L2 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

IT 736980-71-5P

RL: PAC (Pharmacological activity); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(anti-HIV efficiency enhancement with multivalent inhibitors targeting oligomeric gp120)

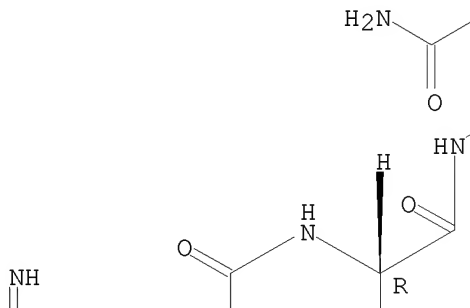
RN 736980-71-5 HCAPLUS

CN L-Cysteinamide, L-cysteiny-L-asparaginy-L-leucyl-L-alanyl-L-arginy-L-cysteiny-L-glutaminyl-L-leucyl-L-arginy-L-cysteiny-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteiny-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteiny-L-alanyl-L-cysteinyglycyl-L-prolylglycylglycyl-, cyclic (1→19), (6→24), (10→26)-tris(disulfide) (CA INDEX NAME)

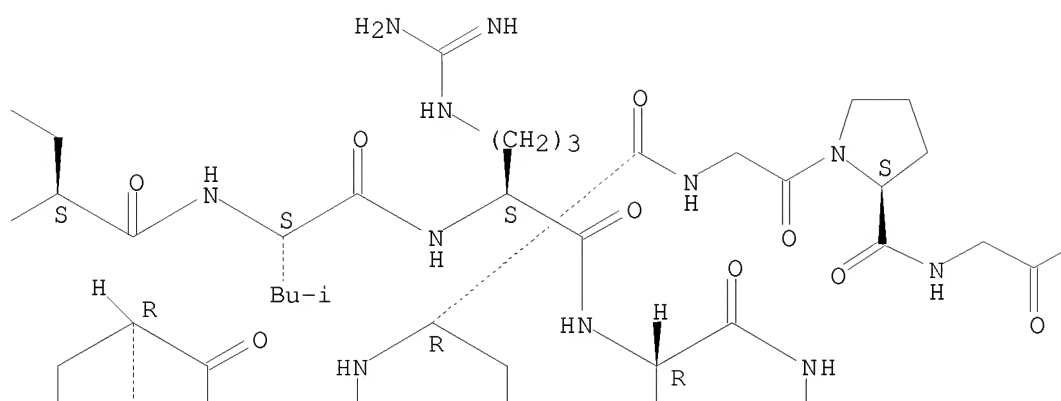
NTE modified

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

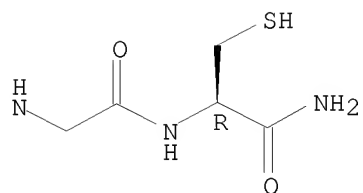
Absolute stereochemistry.

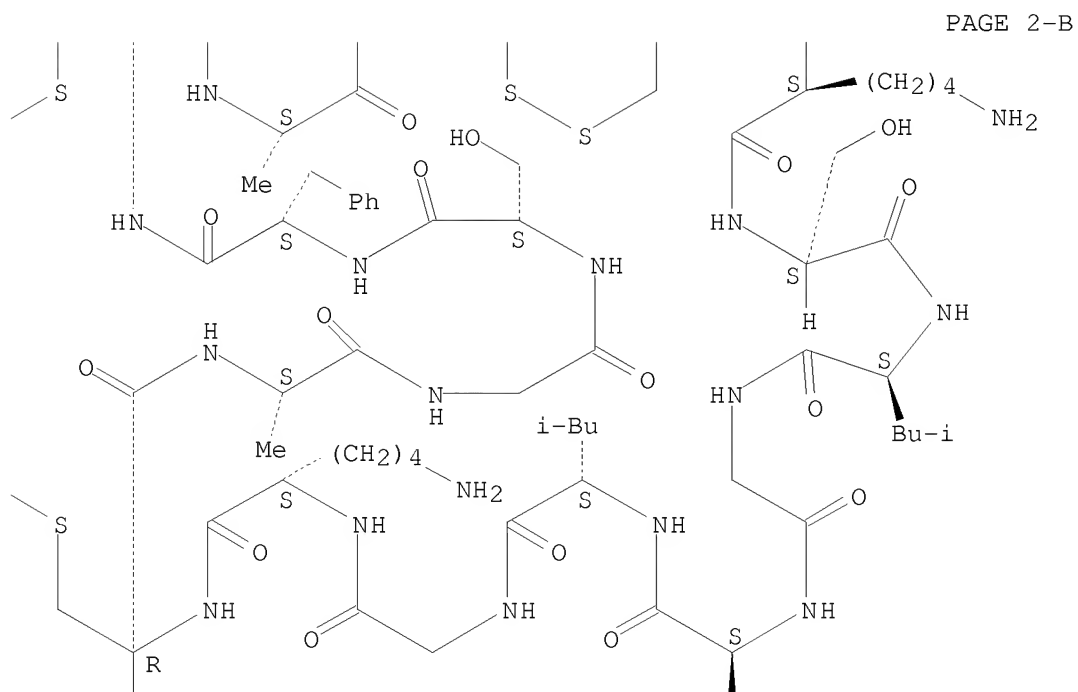
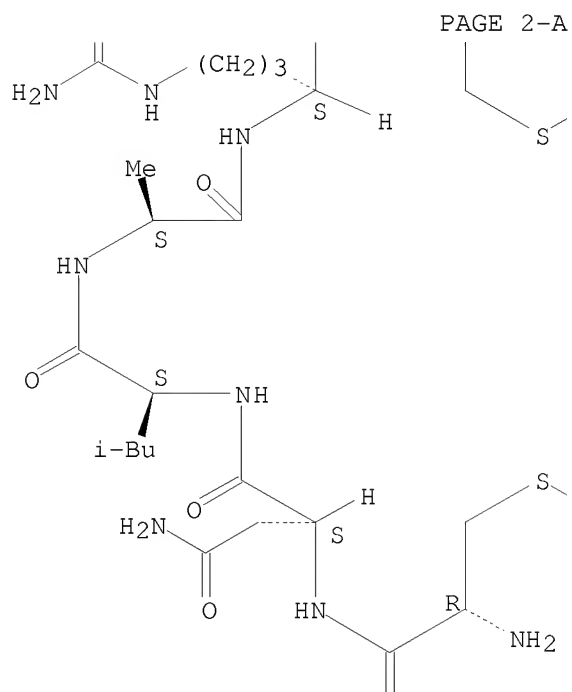


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H

i-Bu

IT 737755-79-2P
 RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (anti-HIV efficiency enhancement with multivalent inhibitors targeting oligomeric gp120)

RN 737755-79-2 HCAPLUS
 CN L-Cysteinamide, 31S,31'S-[(1,8,19,26-tetraoxo-12,15-dioxo-2,9,18,25-tetraazahexacosane-1,26-diyl)bis[4,1-cyclohexanediylmethylene(2,5-dioxo-1,3-pyrrolidinediyl)]]bis[L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-, cyclic (1→19), (1'→19'), (6→24), (6'→24'), (10→26), (10'→26')-hexakis(disulfide) (9CI)
 (CA INDEX NAME)

NTE multichain
 modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

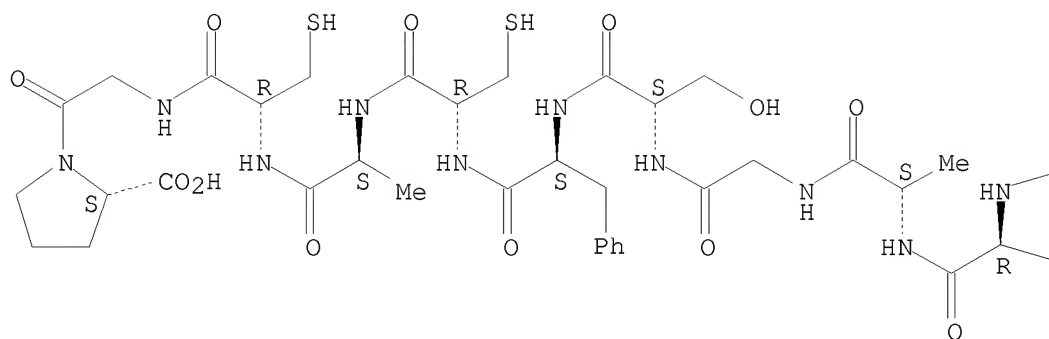
IT 326494-28-4D, linker/spacer conjugates 861926-86-5D, linker/spacer conjugates
 RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (anti-HIV efficiency enhancement with multivalent inhibitors targeting oligomeric gp120)

RN 326494-28-4 HCAPLUS
 CN L-Proline, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl- (CA INDEX NAME)

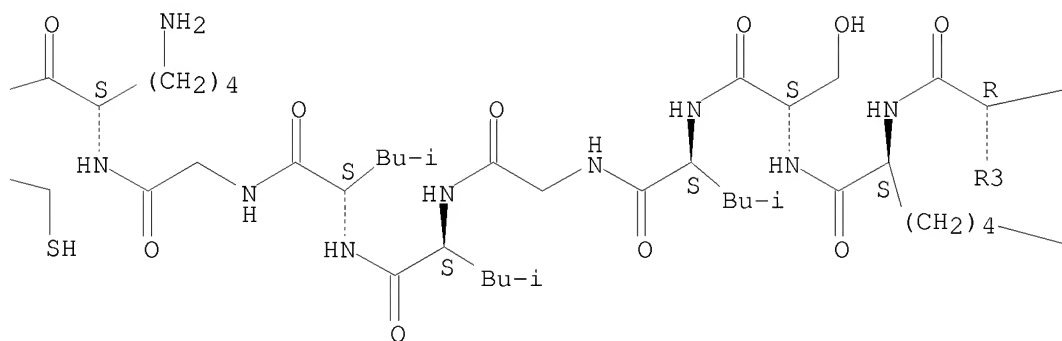
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

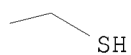
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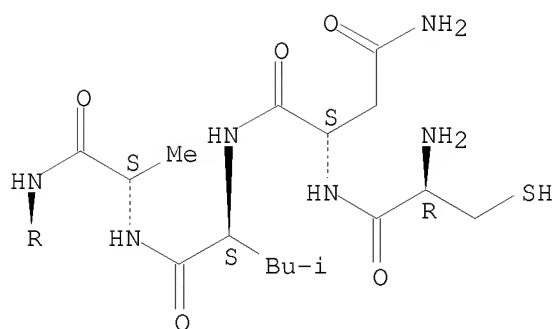
PAGE 1-B



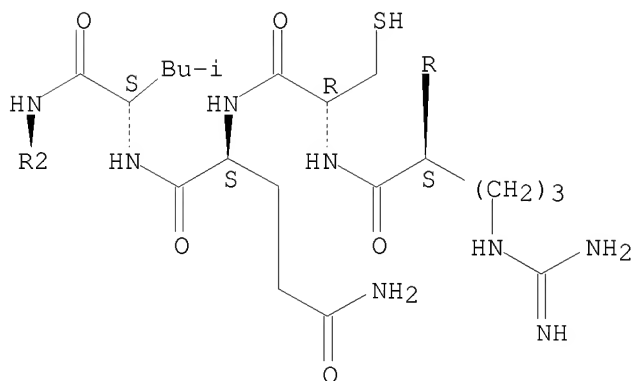
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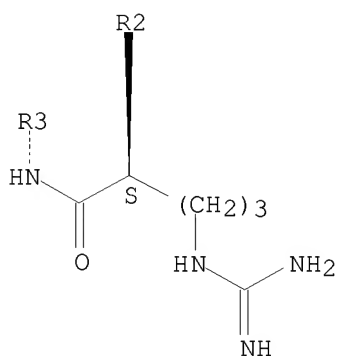
PAGE 2-A



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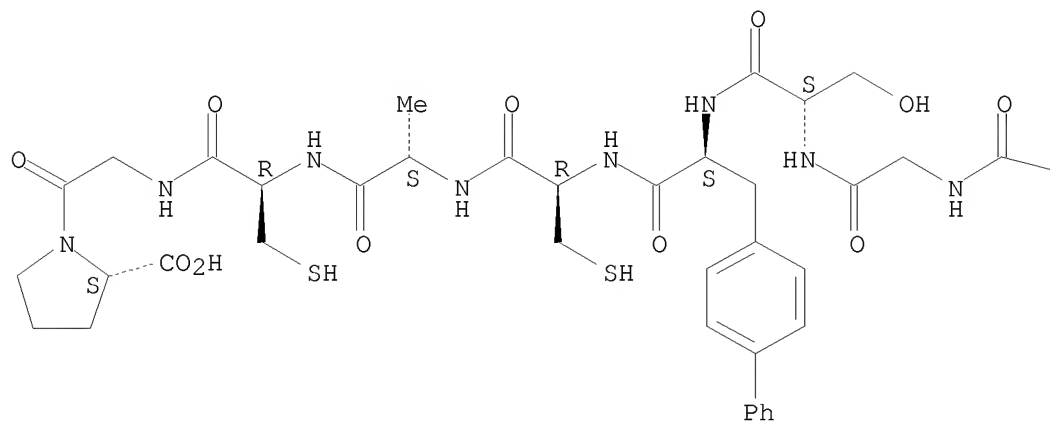
RN 861926-86-5 HCAPLUS
 CN L-Proline, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-alanyl-L-
 arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-
 seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-
 alanylglycyl-L-seryl-3-[1,1'-biphenyl]-4-yl-L-alanyl-L-cysteinyl-L-alanyl-
 L-cysteinylglycyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

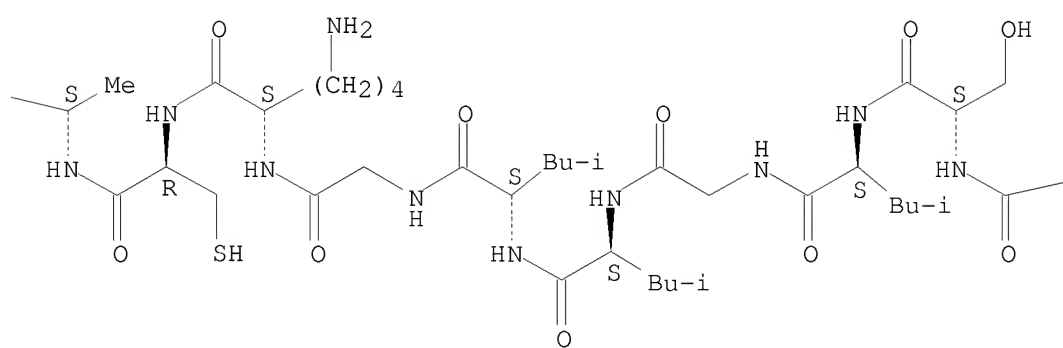
SEQ 1 NLARCQLRCK SLGLLGKCAG SFCACGP

Absolute stereochemistry.

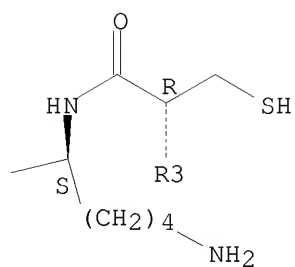
PAGE 1-A



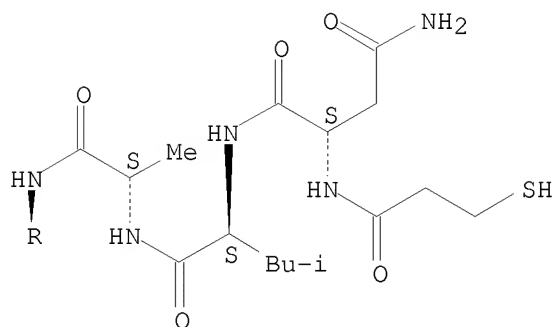
PAGE 1-B



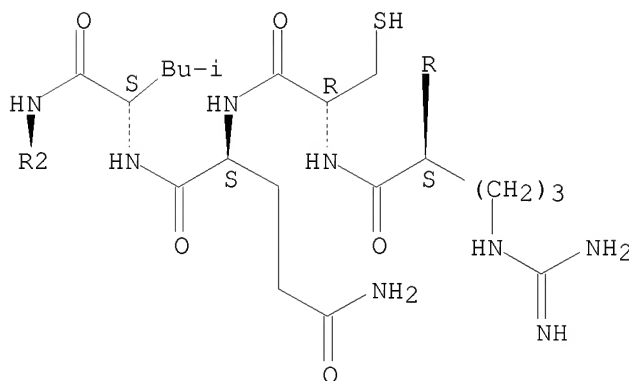
PAGE 1-C



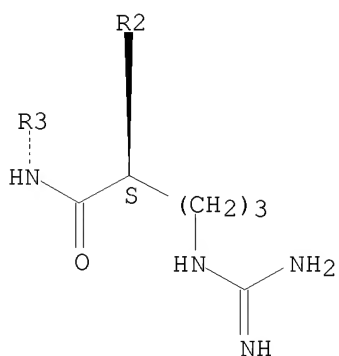
PAGE 2-A



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PAGE 4-A



IT 737755-77-0P 737755-78-1P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)
 (anti-HIV efficiency enhancement with multivalent inhibitors targeting
 oligomeric gp120)
 RN 737755-77-0 HCAPLUS
 CN L-Cysteinamide, 31S,31'S-[oxybis[2,1-ethanediyloxy-2,1-ethanediyl(2,5-
 dioxo-1,3-pyrrolidinediyl)]]bis[L-cysteinyl-L-asparaginyl-L-leucyl-L-

alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-, cyclic (1→19), (1'→19'), (6→24), (6'→24'), (10→26), (10'→26')-hexakis(disulfide) (9CI) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

RN 737755-78-1 HCAPLUS
CN L-Cysteinamide, 31S,31'S-[(6,17-dioxo-10,13-dioxo-7,16-diazadocosane-1,22-diyl)bis(2,5-dioxo-1,3-pyrrolidinediyl)]bis[L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-, cyclic (1→19), (1'→19'), (6→24), (6'→24'), (10→26), (10'→26')-hexakis(disulfide) (9CI) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

IT 736980-69-1P 736980-70-4P
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(anti-HIV efficiency enhancement with multivalent inhibitors targeting oligomeric gp120)

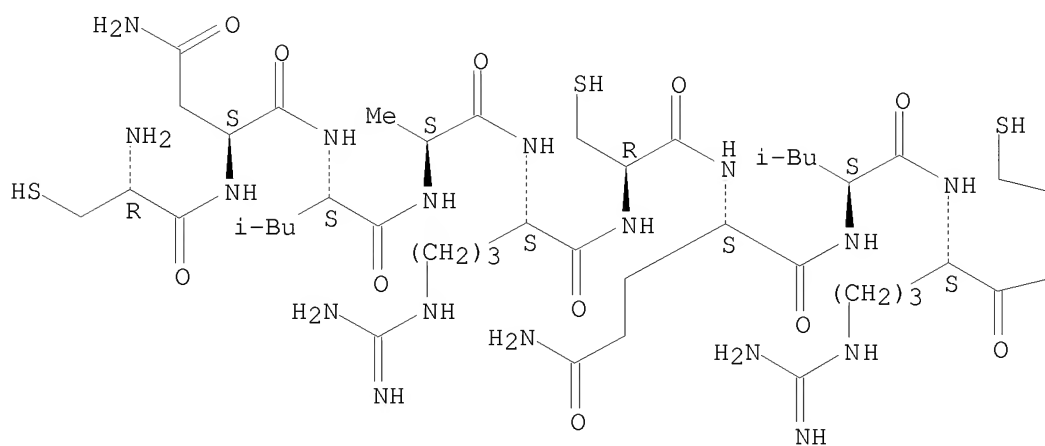
RN 736980-69-1 HCAPLUS
CN L-Cysteinamide, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl- (9CI) (CA INDEX NAME)

NTE modified

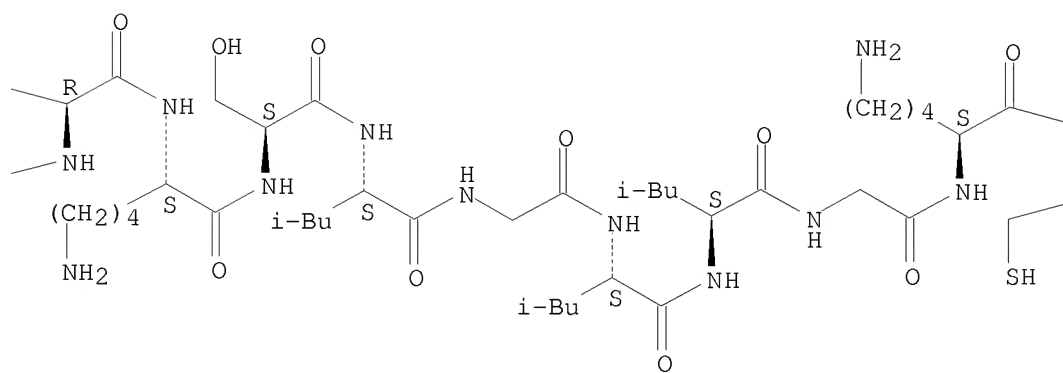
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

Absolute stereochemistry.

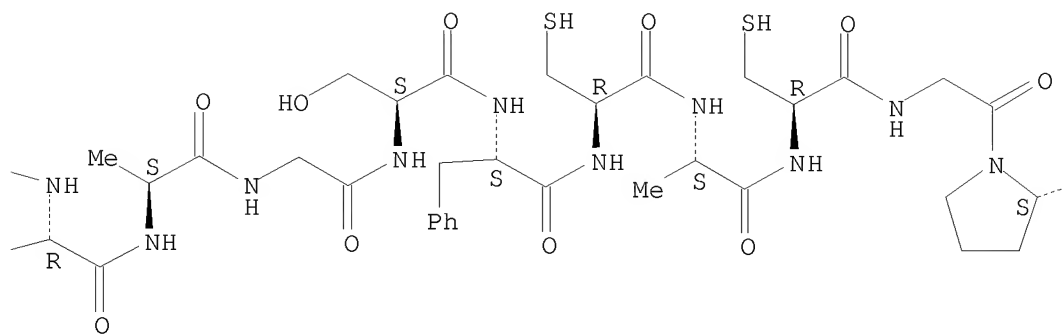
PAGE 1-A

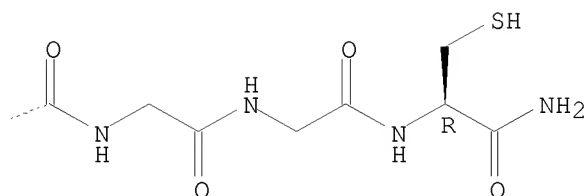


PAGE 1-B



PAGE 1-C





RN 736980-70-4 HCAPLUS

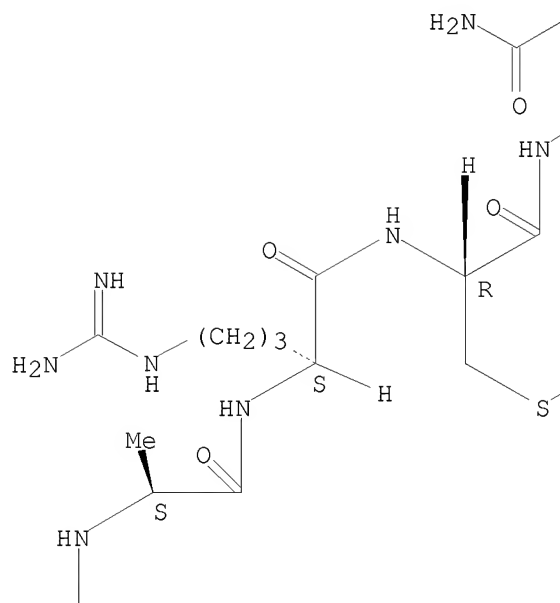
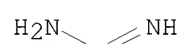
CN L-Cysteinamide, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-, cyclic (1→19), (6→24), (10→26)-tris(disulfide), (31→2')-disulfide with L-γ-glutamyl-L-cysteinylglycine (9CI) (CA INDEX NAME)

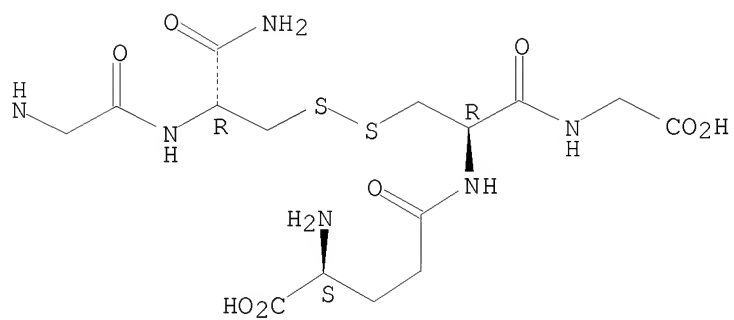
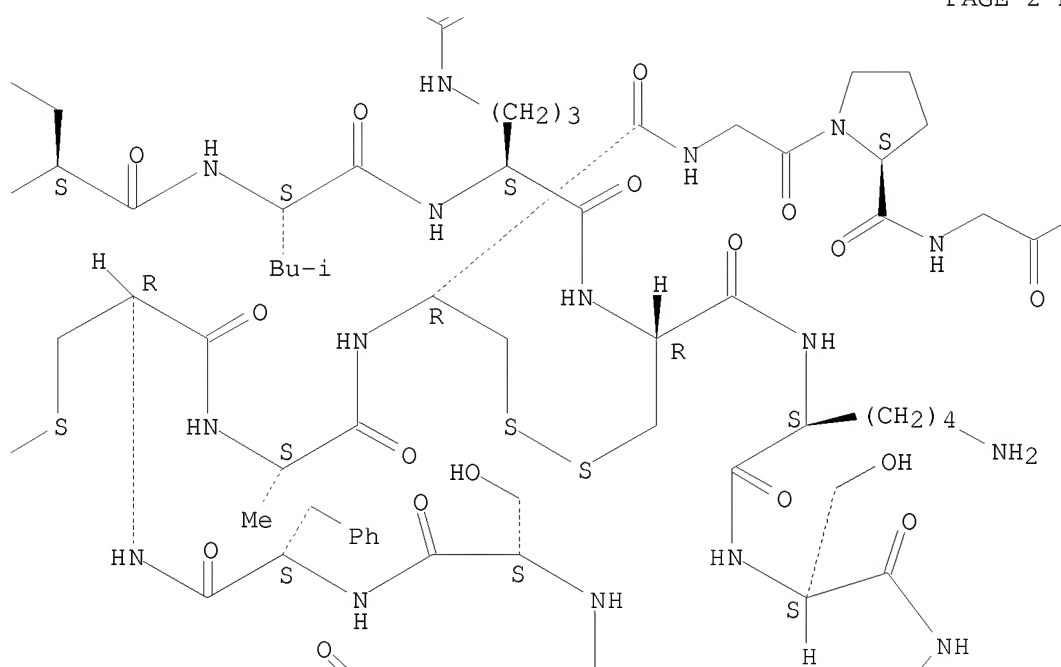
NTE multichain
modified

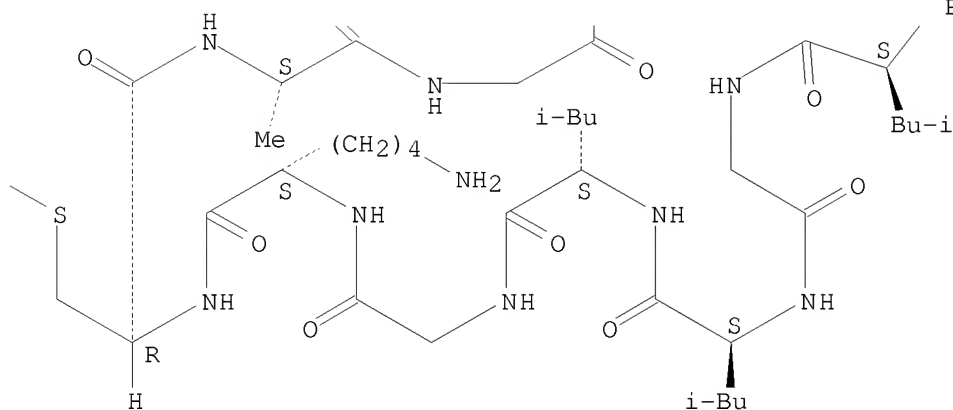
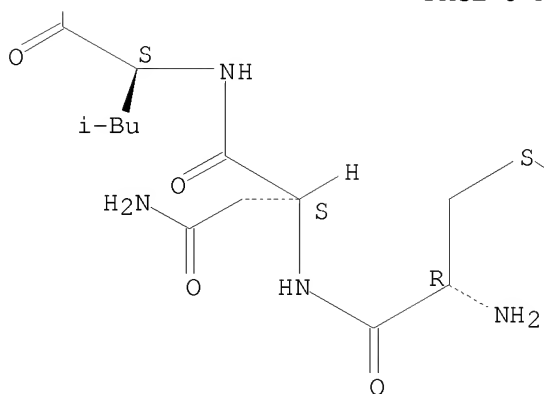
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

1 XCG

Absolute stereochemistry.







L2 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN
 IT 491596-19-1D, complex with gp120 858280-93-0D, complex
 with gp120
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (scorpion-toxin mimics of CD4 in complex with human immunodeficiency
 virus gp120)
 RN 491596-19-1 HCAPLUS
 CN L-Valinamide, N2-(1-thioxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-
 phenylalanyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-
 lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-
 alanylglycyl-L-seryl-3-[1,1'-biphenyl]-4-yl-L-alanyl-L-cysteinyl-L-alanyl-
 L-cysteinyl-, cyclic (5→23), (9→25)-bis(disulfide) (CA INDEX
 NAME)
 NTE modified
 SEQ 1 NLHFCQLRCK SLGLLGKCAG SFCACV

RN 858280-93-0 HCAPLUS
 CN L-Valinamide, N2-(1-thioxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-
 phenylalanyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-
 lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-

alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-,
cyclic (5→23), (9→25)-bis(disulfide) (CA INDEX NAME)

NTE modified

SEQ 1 NLHFCQLRCK SLGLLGKCAG SFCACV

L2 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

IT 823865-03-8

RL: PRP (Properties)

(unclaimed protein sequence; albumin fusion proteins for stabilization
of therapeutic proteins in storage)

RN 823865-03-8 HCAPLUS

CN Peptide, (Xaa-Asn-Leu-His-Phe-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-
Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLHFCQLRC KSLGLLGKCA GSXCACV

L2 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

IT 775343-06-1P 776319-85-8P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);

BIOL (Biological study); PREP (Preparation)

(peptidyl CD4-CAL; covalent attachment of ligands to nucleophilic
proteins guided by non-covalent binding and applications for diagnosis,
therapy and immunoassays)

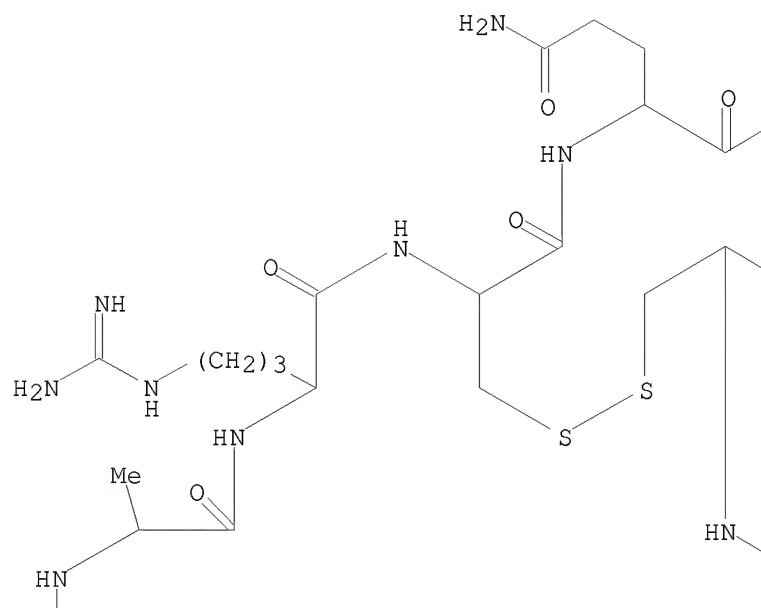
RN 775343-06-1 HCAPLUS

CN L-Prolinamide, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-
cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-
leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-
seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-N-[[4-
(aminoiminomethyl)phenyl](diphenoxyphosphinyl)methyl]-, cyclic
(1→19), (6→24), (10→26)-tris(disulfide) (9CI) (CA
INDEX NAME)

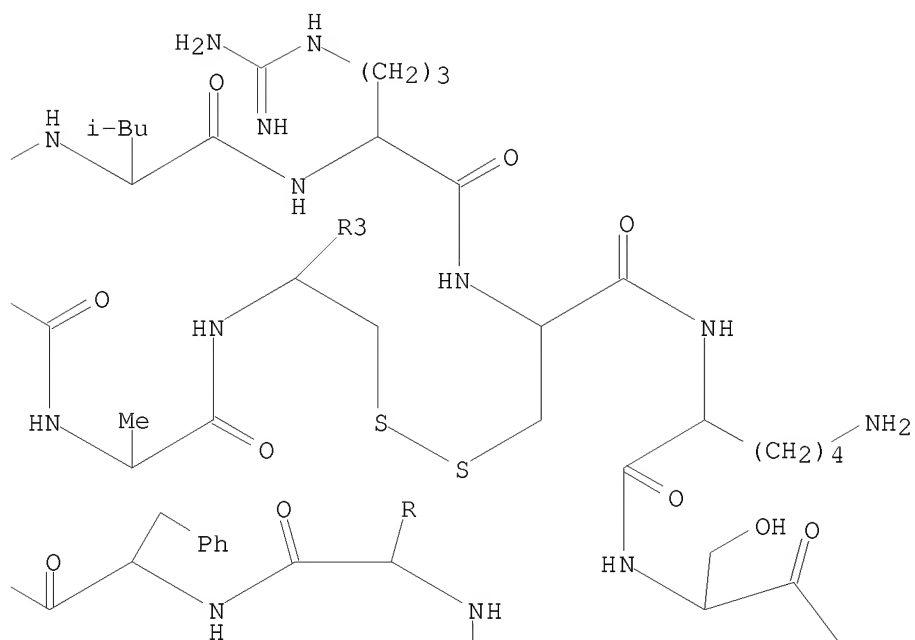
NTE modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

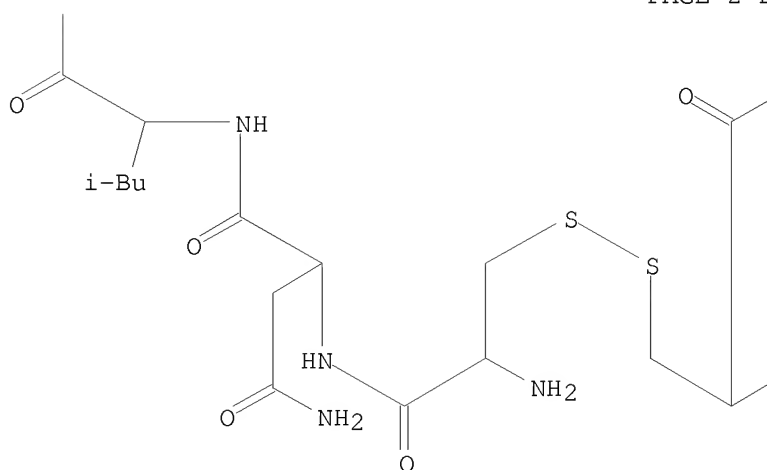
PAGE 1-B



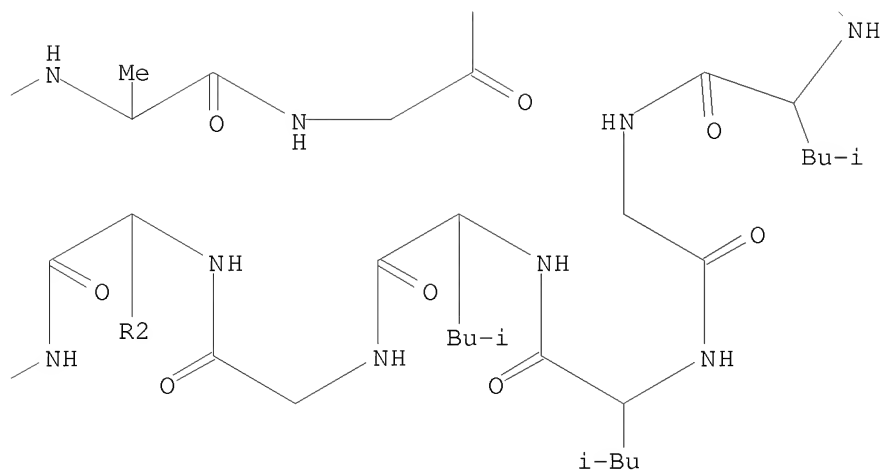
PAGE 1-C



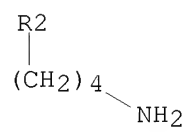
PAGE 2-B

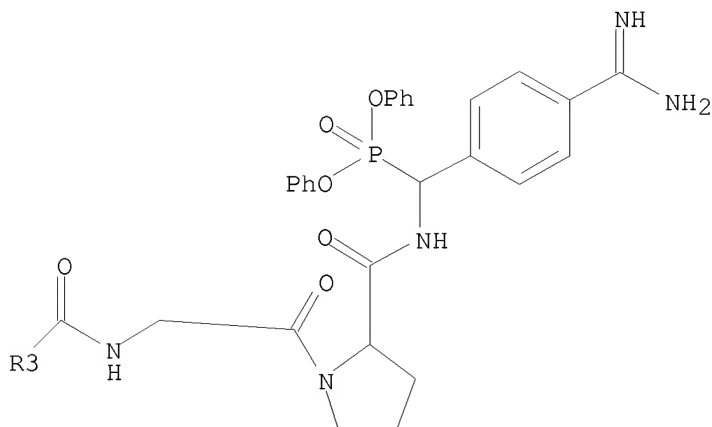


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PAGE 3-A





RN 776319-85-8 HCAPLUS

CN L-Prolinamide, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-N6-[8-[[[4-(aminoiminomethyl)phenyl](diphenoxyphosphinyl)methyl]amino]-1,8-dioxooctyl]-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-N6-[8-[[[4-(aminoiminomethyl)phenyl](diphenoxyphosphinyl)methyl]amino]-1,8-dioxooctyl]-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-, cyclic (1→19), (6→24), (10→26)-tris(disulfide) (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

L2 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

IT 736980-71-5P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(preparation and anti-HIV activity of bivalent CD4-mimetic miniproteins designed to target CD4-binding pockets in HIV envelope glycoprotein gp120)

RN 736980-71-5 HCAPLUS

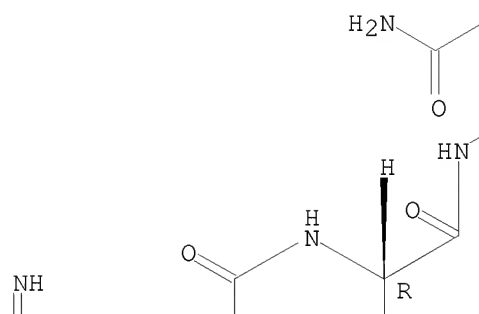
CN L-Cysteinamide, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-, cyclic (1→19), (6→24), (10→26)-tris(disulfide) (CA INDEX NAME)

NTE modified

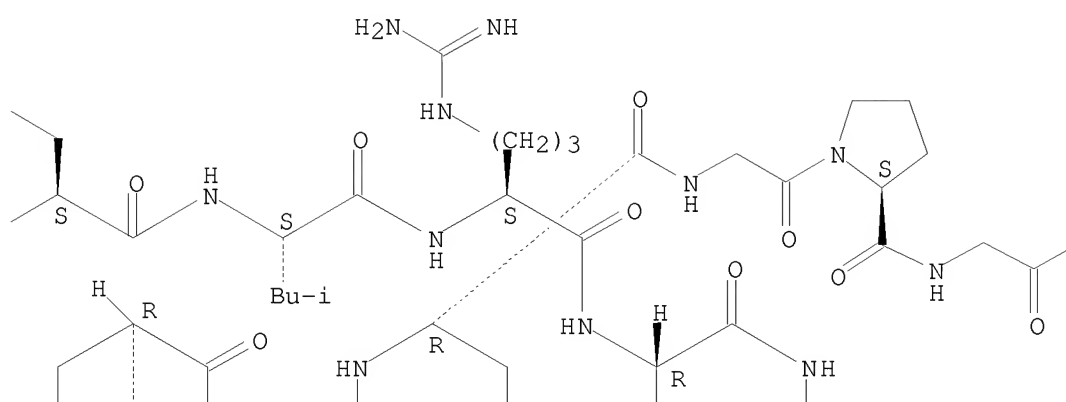
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

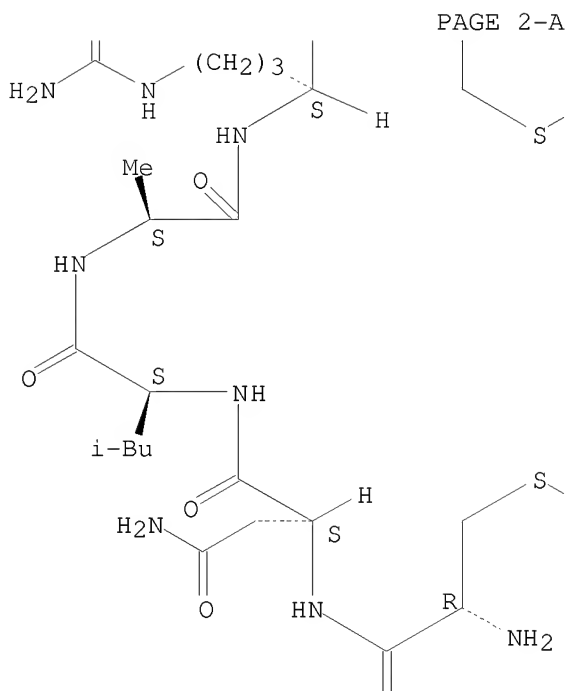
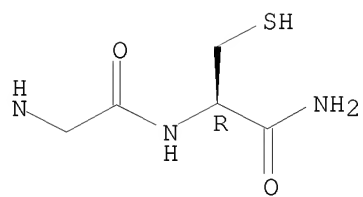
Absolute stereochemistry.

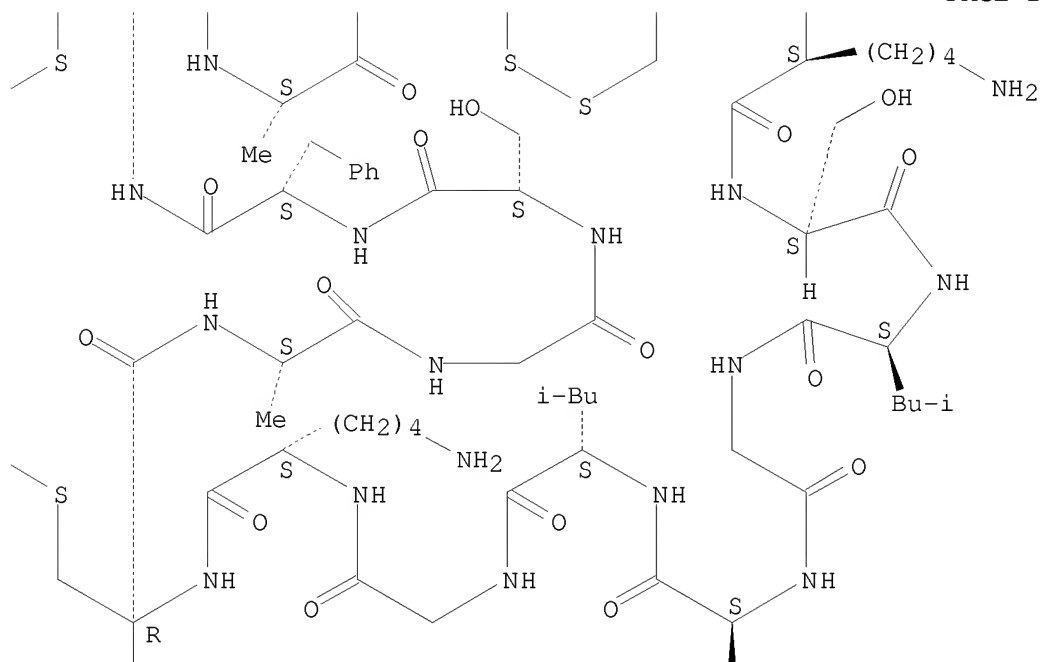
PAGE 1-A



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O

H

i-Bu

IT 737755-77-0P 737755-78-1P 737755-79-2P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL
 (Biological study); PREP (Preparation)
 (preparation and anti-HIV activity of bivalent CD4-mimetic miniproteins
 designed to target CD4-binding pockets in HIV envelope glycoprotein
 gp120)

RN 737755-77-0 HCAPLUS
 CN L-Cysteinamide, 31S,31'S-[oxybis[2,1-ethanedioxy-2,1-ethanediyl(2,5-
 dioxo-1,3-pyrrolidinediyl)]]bis[L-cysteinyl-L-asparaginyl-L-leucyl-L-
 alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-
 lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-
 alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-
 L-prolylglycylglycyl-, cyclic (1→19), (1'→19'), (6→24),
 (6'→24'), (10→26), (10'→26')-hexakis(disulfide) (9CI)
 (CA INDEX NAME)

NTE multichain
 modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

RN 737755-78-1 HCAPLUS
CN L-Cysteinamide, 31S,31'S-[(6,17-dioxo-10,13-dioxo-7,16-diazadocosane-1,22-diyl)bis(2,5-dioxo-1,3-pyrrolidinediyl)]bis[L-cysteiny-L-asparaginy-L-leucyl-L-alanyl-L-arginyl-L-cysteiny-L-glutaminyl-L-leucyl-L-arginyl-L-cysteiny-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteiny-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteiny-L-alanyl-L-cysteinyglycyl-L-prolylglycylglycyl-, cyclic (1→19), (1'→19'), (6→24), (6'→24'), (10→26), (10'→26')-hexakis(disulfide) (9CI) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

RN 737755-79-2 HCAPLUS
CN L-Cysteinamide, 31S,31'S-[(1,8,19,26-tetraoxo-12,15-dioxo-2,9,18,25-tetraazahexacosane-1,26-diyl)bis[4,1-cyclohexanediylmethylen(2,5-dioxo-1,3-pyrrolidinediyl)]]bis[L-cysteiny-L-asparaginy-L-leucyl-L-alanyl-L-arginyl-L-cysteiny-L-glutaminyl-L-leucyl-L-arginyl-L-cysteiny-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteiny-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteiny-L-alanyl-L-cysteinyglycyl-L-prolylglycylglycyl-, cyclic (1→19), (1'→19'), (6→24), (6'→24'), (10→26), (10'→26')-hexakis(disulfide) (9CI) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

IT 736980-69-1P 736980-70-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and anti-HIV activity of bivalent CD4-mimetic miniproteins designed to target CD4-binding pockets in HIV envelope glycoprotein gp120)

RN 736980-69-1 HCAPLUS
CN L-Cysteinamide, L-cysteiny-L-asparaginy-L-leucyl-L-alanyl-L-arginyl-L-cysteiny-L-glutaminyl-L-leucyl-L-arginyl-L-cysteiny-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteiny-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteiny-L-alanyl-L-cysteinyglycyl-L-prolylglycylglycyl- (9CI) (CA INDEX NAME)

NTE modified

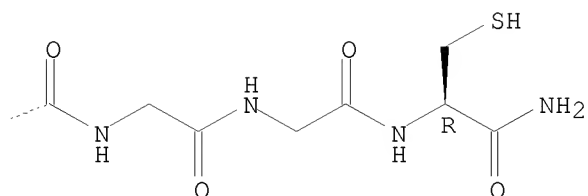
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

Absolute stereochemistry.

The diagram shows a linear peptide chain with the following components from left to right:

- A side chain starting with a thiol group (HS-CH₂-) attached to a chiral center (R), which is part of an amide bond.
- A side chain with a primary amine group (H₂N-C(=O)-) attached to a chiral center (S), which is part of an amide bond.
- A side chain with an isobutyl group (i-Bu) attached to a chiral center (S), which is part of an amide bond.
- A side chain with a methyl group (Me) attached to a chiral center (S), which is part of an amide bond.
- A side chain with a (CH₂)₃ group attached to a chiral center (S), which is part of an amide bond.
- A side chain with a thiol group (SH) attached to a chiral center (R), which is part of an amide bond.
- A side chain with an isobutyl group (i-Bu) attached to a chiral center (S), which is part of an amide bond.
- A side chain with a (CH₂)₃ group attached to a chiral center (S), which is part of an amide bond.
- A side chain with a thiol group (SH) attached to a chiral center (S), which is part of an amide bond.

The backbone consists of amide bonds connecting the nitrogen atoms of the side chains. The chiral centers are indicated by wedged and dashed bonds.



RN 736980-70-4 HCAPLUS

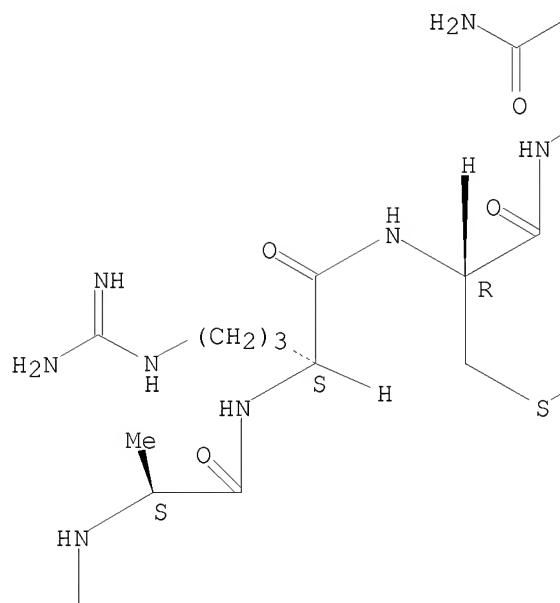
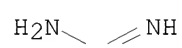
CN L-Cysteinamide, L-cysteinyl-L-asparaginyL-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-, cyclic (1→19), (6→24), (10→26)-tris(disulfide), (31→2')-disulfide with L-γ-glutamyl-L-cysteinylglycine (9CI) (CA INDEX NAME)

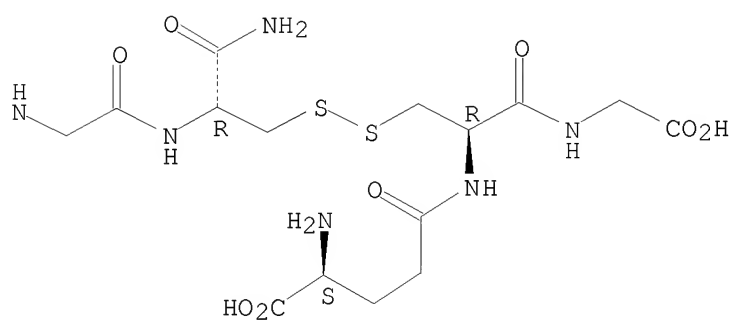
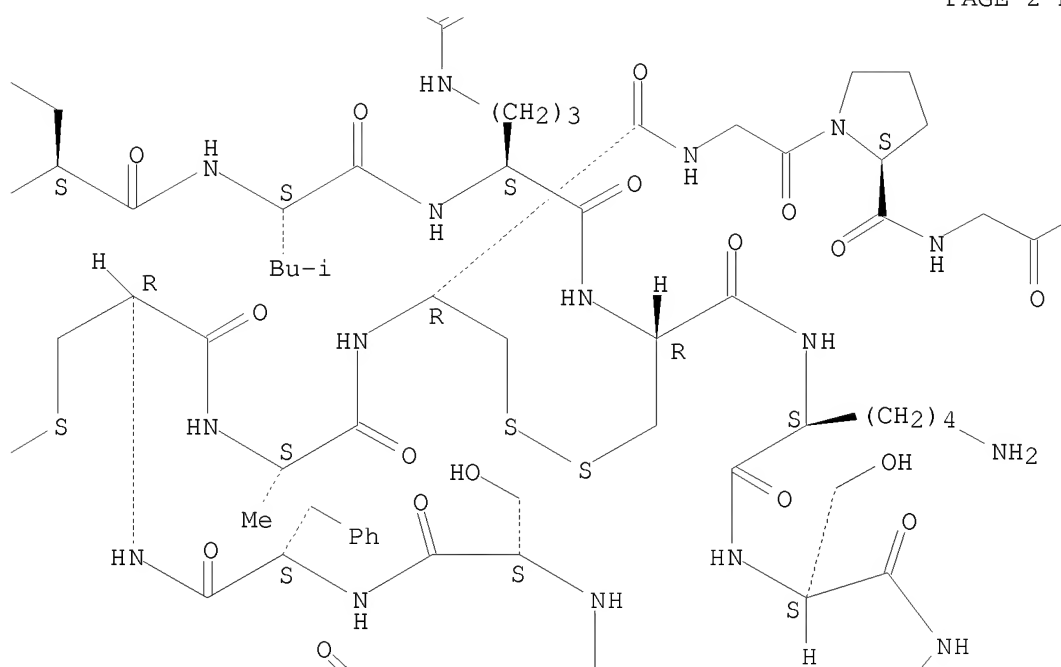
NTE multichain
modified

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

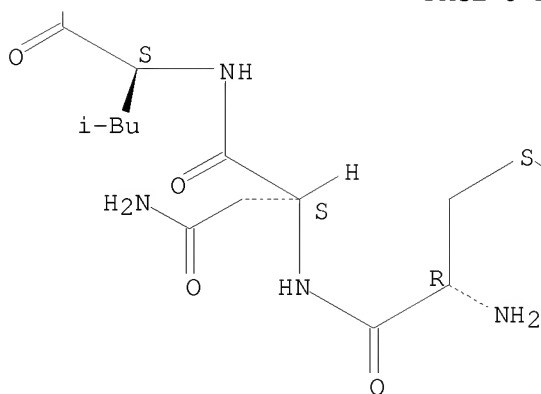
1 XCG

Absolute stereochemistry.

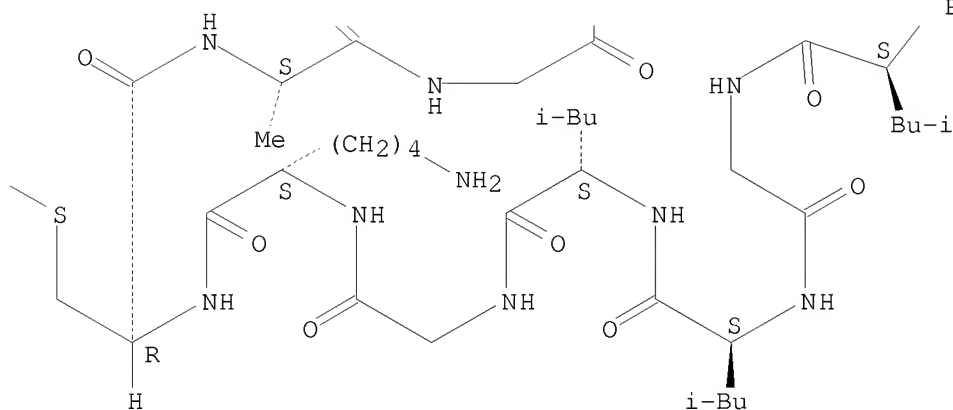




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IT 736980-68-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of spacers for incorporation into bivalent CD4-mimetic miniproteins)

RN 736980-68-0 HCAPLUS

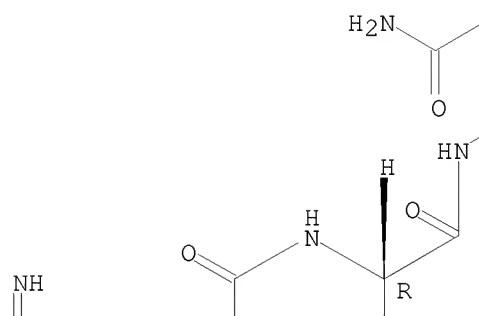
CN L-Cysteinamide, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-S-(2-amino-2-oxoethyl)-, cyclic (1→19), (6→24), (10→26)-tris(disulfide) (9CI) (CA INDEX NAME)

NTE modified

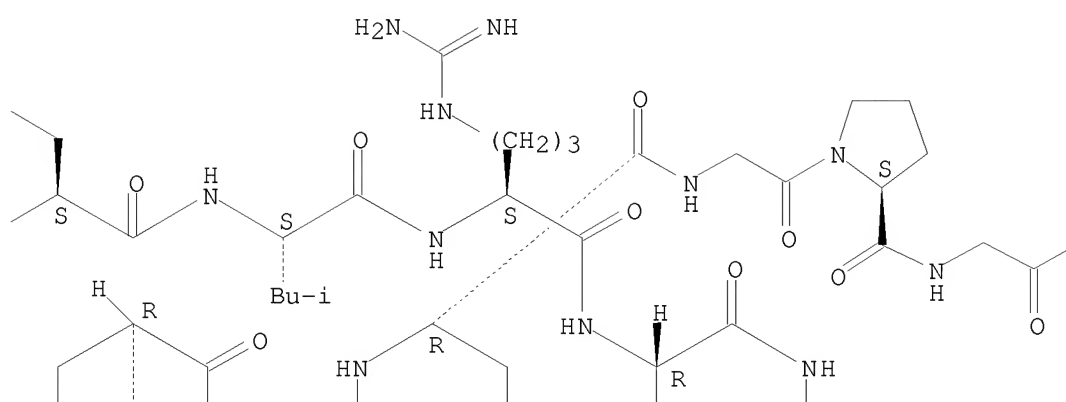
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

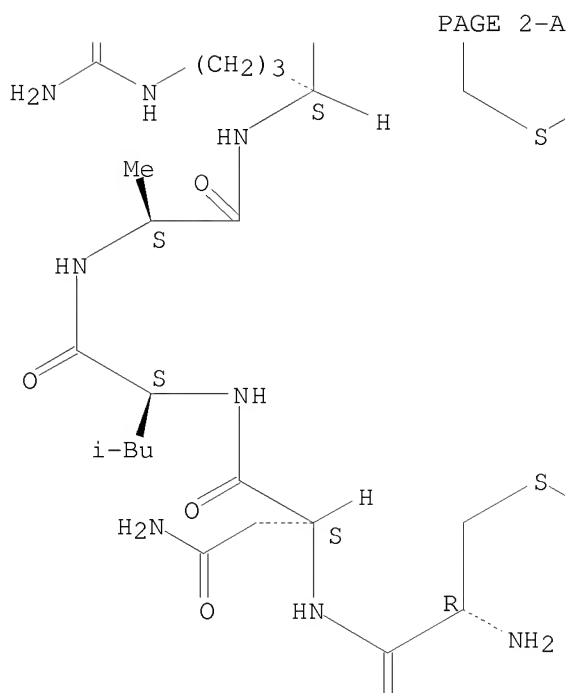
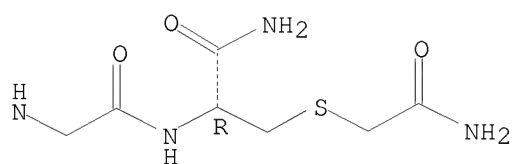
Absolute stereochemistry.

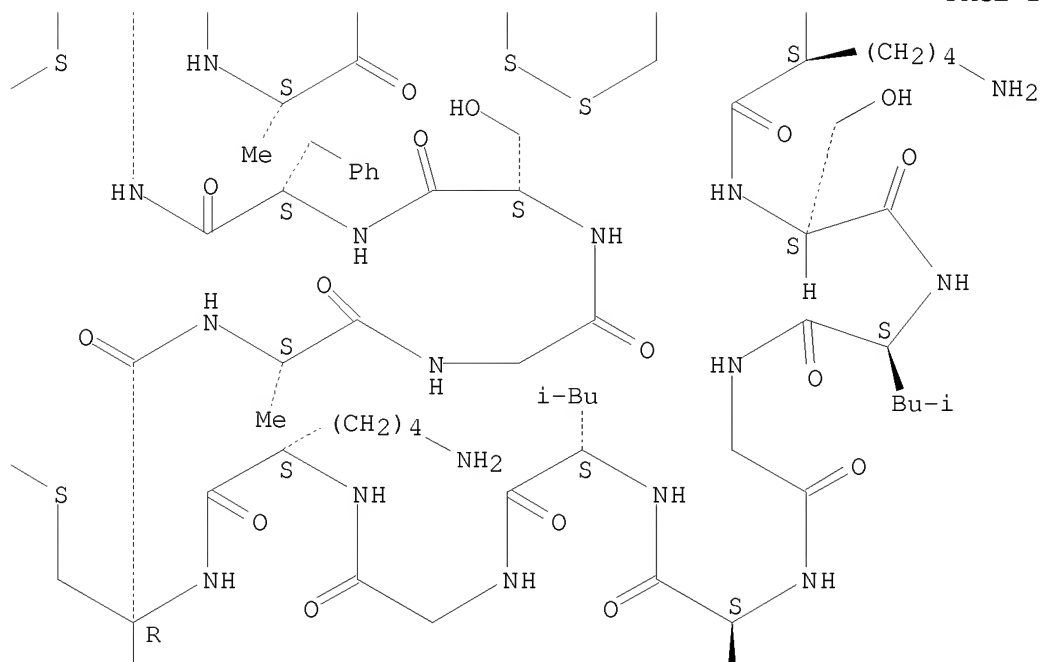
PAGE 1-A



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O

H

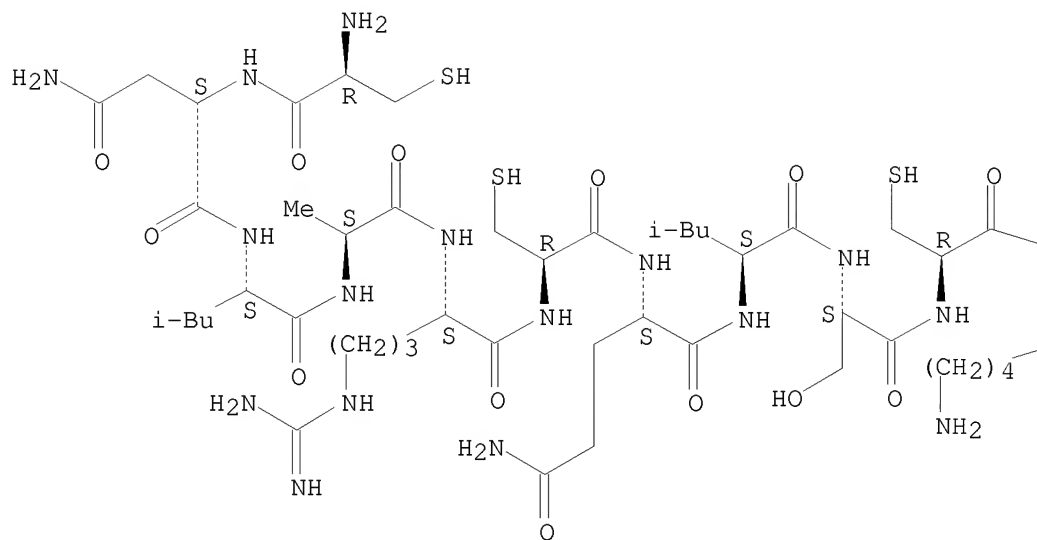
i-Bu

L2 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN
 IT 326494-27-3DP, mutated and chimeric derivs. with HIV env
 685876-61-3DP, mutated and chimeric derivs. with HIV env
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
 DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
 (Biological study); PREP (Preparation); USES (Uses)
 (HIV envelope-CD4 complexes and hybrids for diagnosis, treatment and
 prevention HIV infection)
 RN 326494-27-3 HCAPLUS
 CN Glycine, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-
 L-glutaminyl-L-leucyl-L-seryl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-
 leucyl-L-lysylglycylglycyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-
 phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl- (9CI) (CA INDEX NAME)

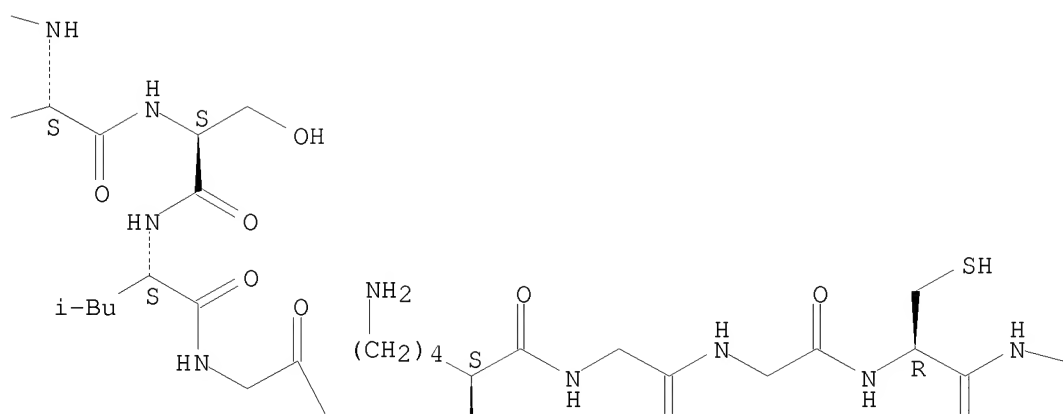
SEQ 1 CNLARCQLSC KSLGLKGGCA GSFCACG

Absolute stereochemistry.

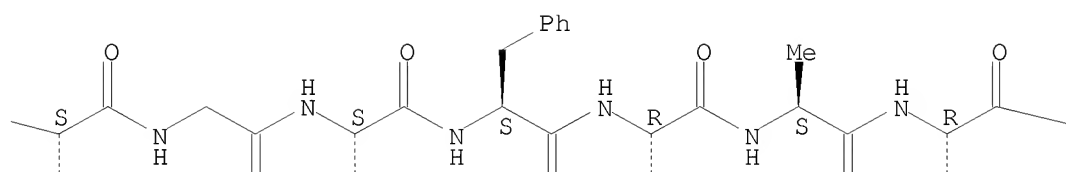
PAGE 1-A



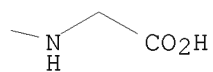
PAGE 1-B



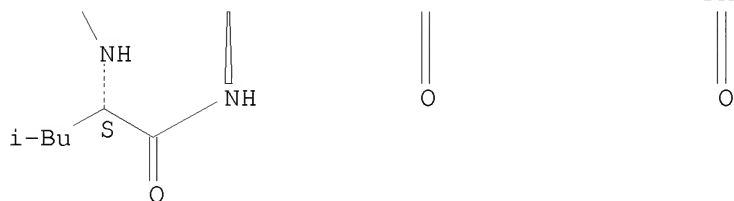
PAGE 1-C



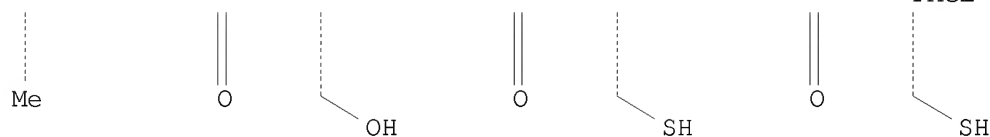
PAGE 1-D



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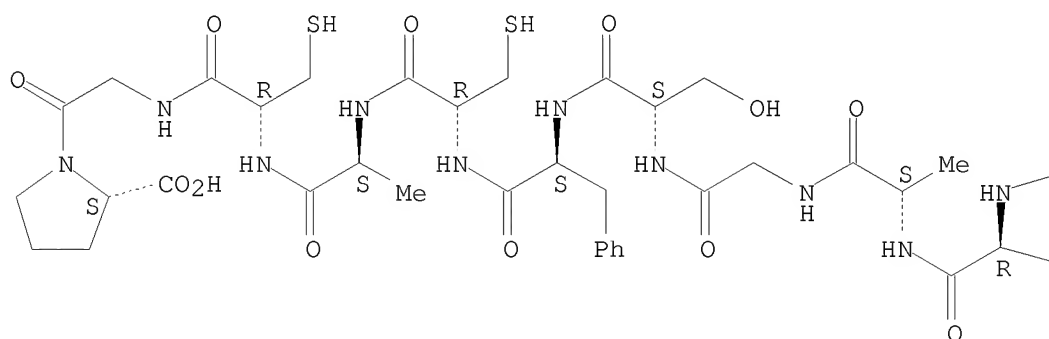


RN 685876-61-3 HCAPLUS
 CN L-Proline, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-seryl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl- (9CI) (CA INDEX NAME)

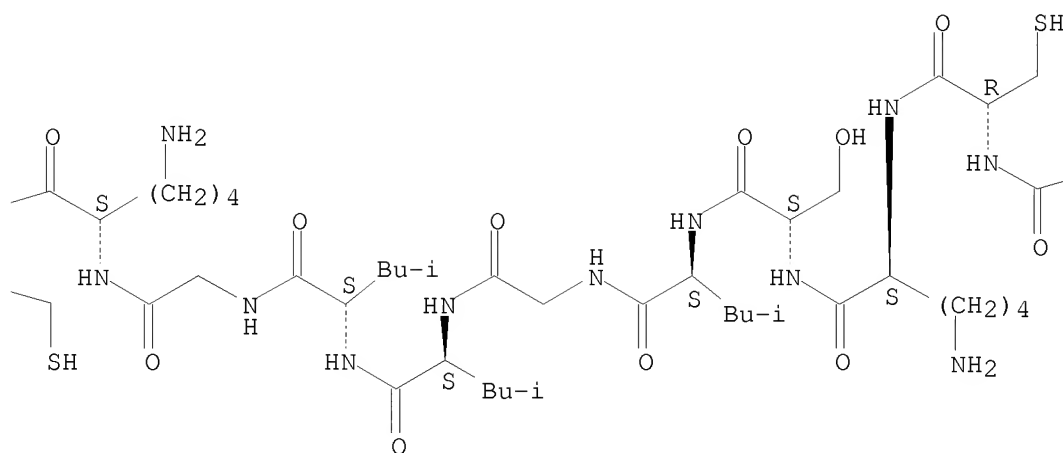
SEQ 1 CNLARCQLSC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

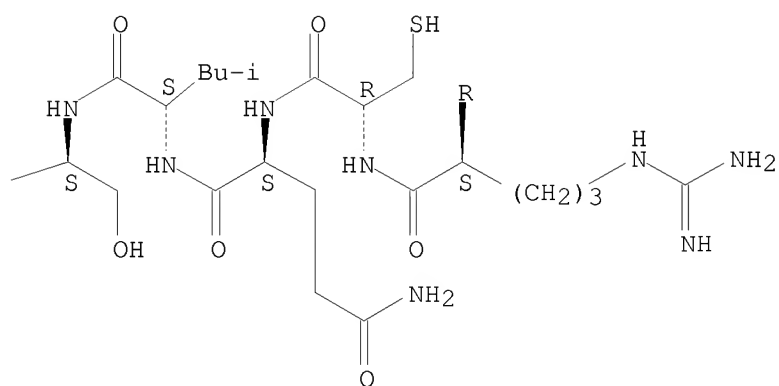
PAGE 1-A



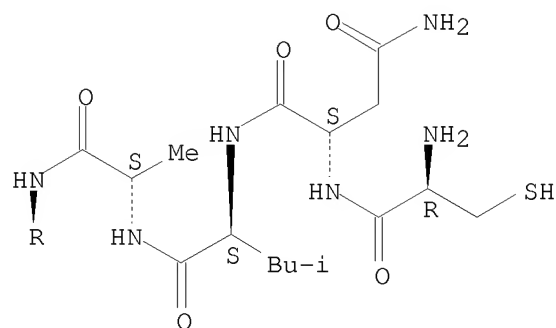
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L2 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN
 IT 491596-19-1
 RL: BSU (Biological study, unclassified); PRP (Properties); THU
 (Therapeutic use); BIOL (Biological study); USES (Uses)
 (design of CD4 miniprotein as inhibitor of HIV-1 infection and

potential component of an AIDS vaccine)
 RN 491596-19-1 HCAPLUS
 CN L-Valinamide, N2-(1-thioxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-3-[1,1'-biphenyl]-4-yl-L-alanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (5→23), (9→25)-bis(disulfide) (CA INDEX NAME)

NTE modified

SEQ 1 NLHFCQLRCK SLGLLGKCAG SFCACV

L2 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

IT 326494-28-4 613958-82-0 613958-83-1
 613958-84-2 613958-85-3 613958-86-4
 613958-87-5 613958-88-6 613958-90-0
 613958-91-1 613958-93-3 613958-94-4

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(anti-HIV composition inducing exposure of gp120 epitope CD4i)

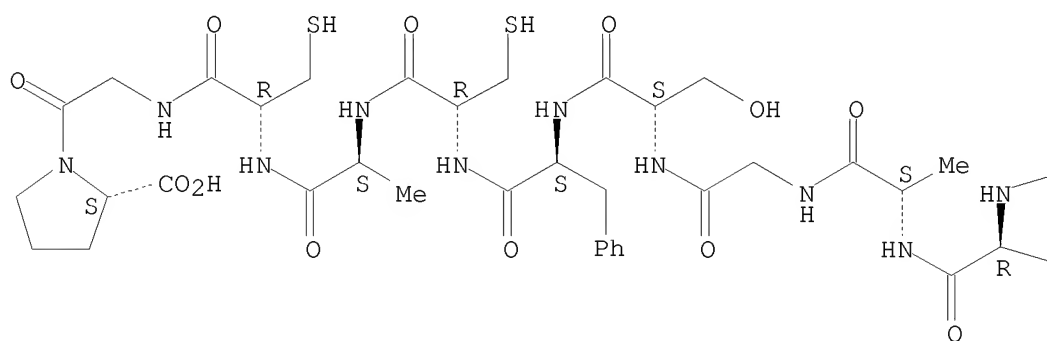
RN 326494-28-4 HCAPLUS

CN L-Proline, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl- (CA INDEX NAME)

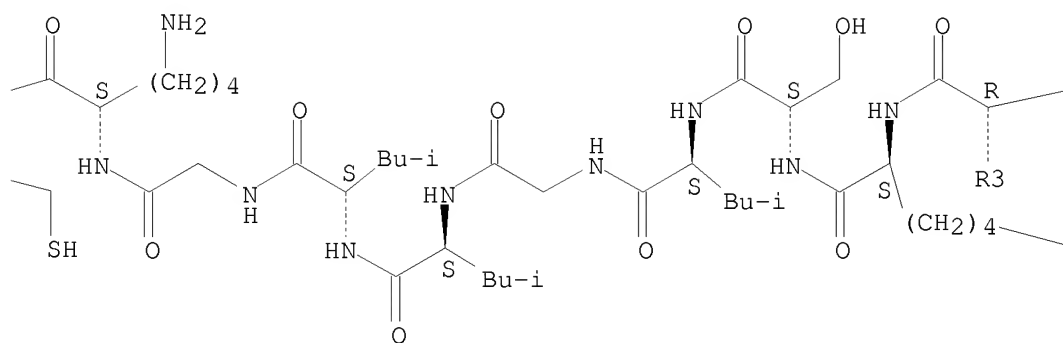
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

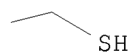
PAGE 1-A



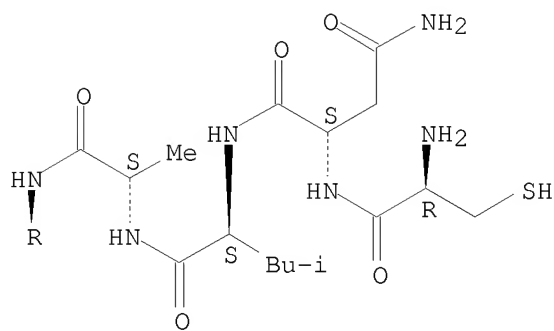
PAGE 1-B

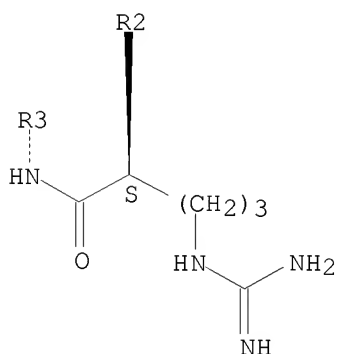
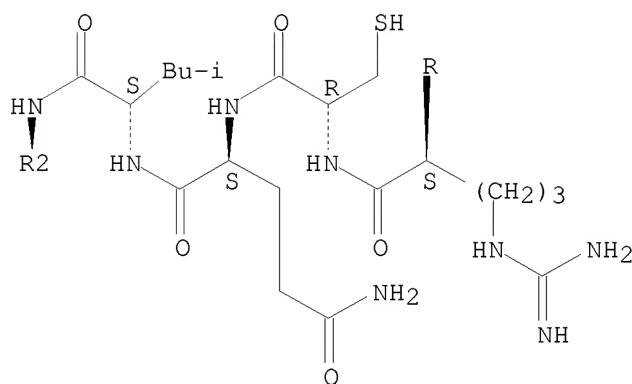


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RN 613958-82-0 HCAPLUS
 CN Peptide, (Xaa-Asn-Leu-Ala-Arg-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Phe-Cys-Ala-Cys-Gly-Pro) (9CI) (CA INDEX NAME)

SEQ 1 XNLARCQLRC KSLGLLGKCA GSFCACGP

RN 613958-83-1 HCAPLUS
 CN Peptide, (Xaa-Asn-Leu-His-Phe-Cys-Val-Gln-Arg-Cys-His-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLHFCVQRC HSLGLLGKCA GSXCACV

RN 613958-84-2 HCAPLUS
 CN Peptide, (Xaa-Asn-Leu-Ala-Phe-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Phe-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLAFQQLRC KSLGLLGKCA GSFCACV

RN 613958-85-3 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-Ala-Phe-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Ser-Ser-Phe-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLAFCQLRC KSLGLLGKCA SSFCACV

RN 613958-86-4 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-Ala-Phe-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-His-Phe-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLAFCQLRC KSLGLLGKCA GHFCACV

RN 613958-87-5 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-Ala-Phe-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Asn-Phe-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLAFCQLRC KSLGLLGKCA GNFCACV

RN 613958-88-6 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-Gln-Phe-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLQFCQLRC KSLGLLGKCA GSXCACV

RN 613958-90-0 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-Ala-Arg-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLARCQLRC KSLGLLGKCA GSXCACV

RN 613958-91-1 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-His-Phe-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLHFCQLRC KSLGLLGKCA GSXCACV

RN 613958-93-3 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-His-Phe-Cys-Val-Gln-Arg-Cys-His-Ser-Leu-Gly-Lys-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Phe-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLHFCVQRC HSLGKLGKCA GSFCACV

RN 613958-94-4 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-His-Phe-Cys-Val-Gln-Arg-Cys-His-Ser-Leu-Gly-Leu-Lys-Gly-Lys-Cys-Ala-Gly-Ser-Phe-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

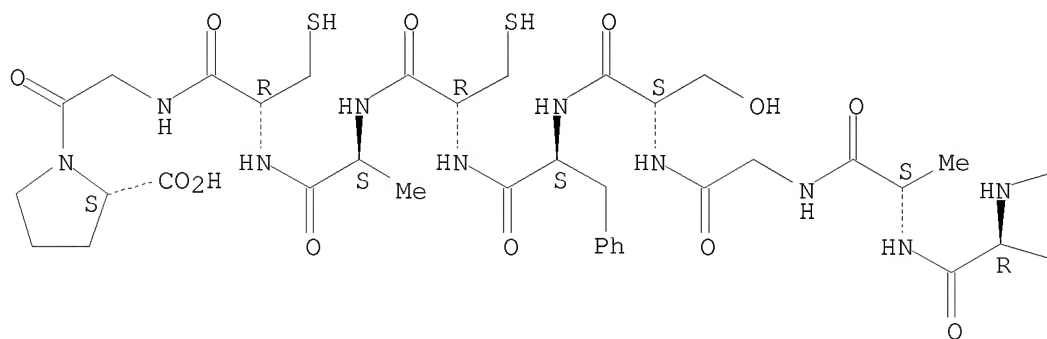
SEQ 1 XNLHFCVQRC HSLGLKGKCA GSFCACV

L2 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN
IT 326494-28-4
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)
(engineering of CD4 mini-protein exhibiting native-like affinity for
gp120env and inhibiting HIV-1 entry into T cells)
RN 326494-28-4 HCAPLUS
CN L-Proline, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-
cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-
leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-
seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl- (CA INDEX
NAME)

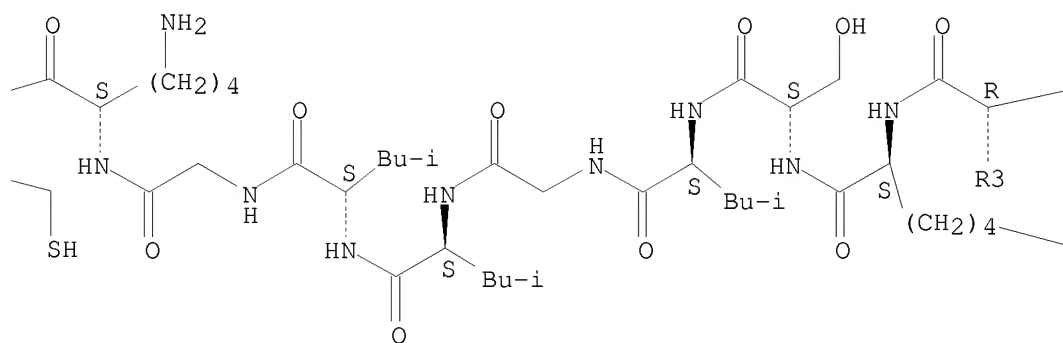
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

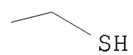
PAGE 1-A



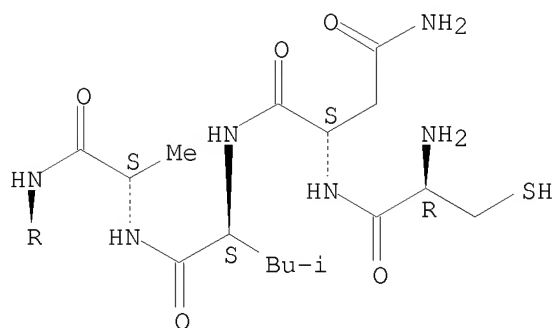
PAGE 1-B

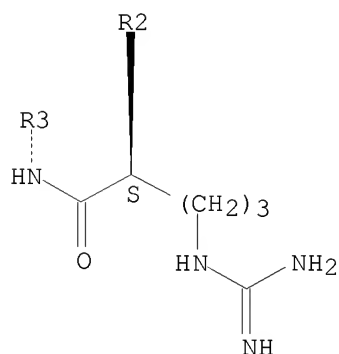
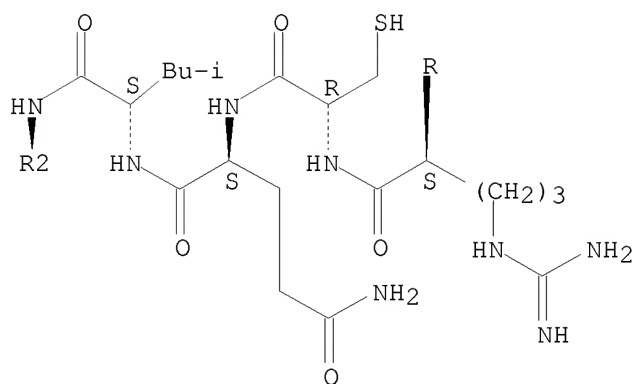


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L2 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

IT 444585-61-9P 444585-62-0P 444585-63-1P

444585-64-2P 444585-65-3P 444585-66-4P

444585-67-5P 444585-68-6P 485801-88-5P

485801-96-5P 487059-89-2P 487065-87-2P

487065-88-3P 487065-90-7P 487065-91-8P

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);

PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL

(Biological study); PREP (Preparation); USES (Uses)

(immunodeficiency virus gp120-binding mol. screening method)

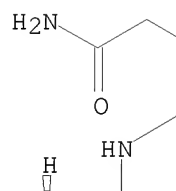
RN 444585-61-9 HCAPLUS

CN L-Proline, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-, cyclic (1→19), (6→24), (10→26)-tris(disulfide) (9CI) (CA INDEX NAME)

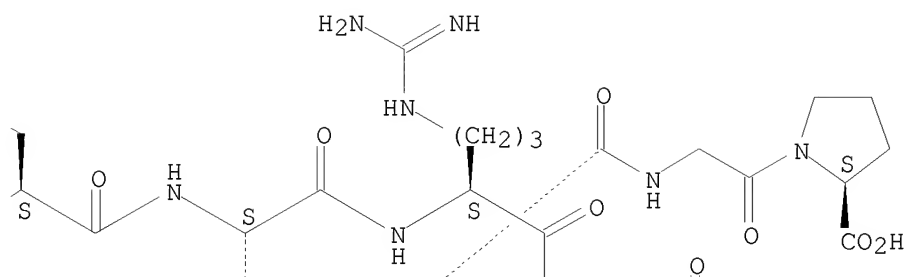
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

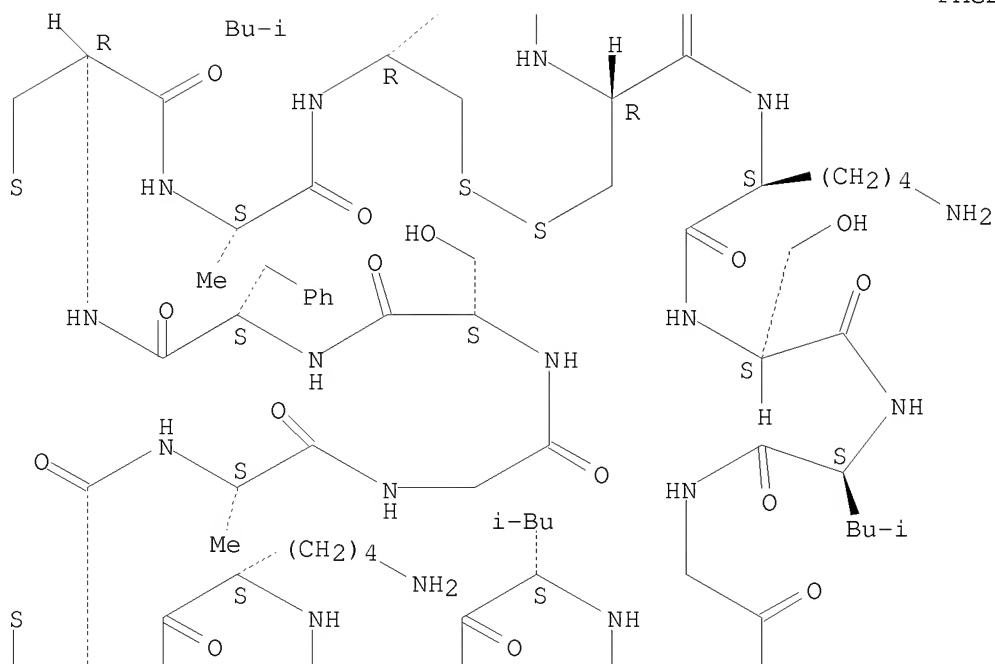
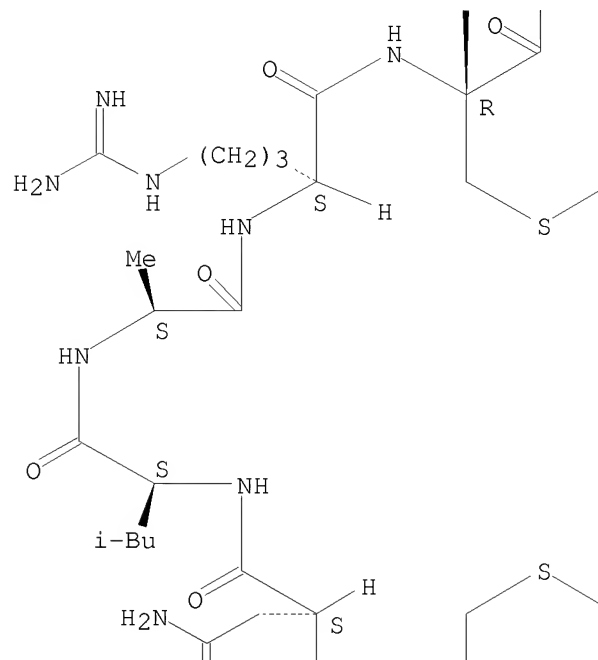
Absolute stereochemistry.

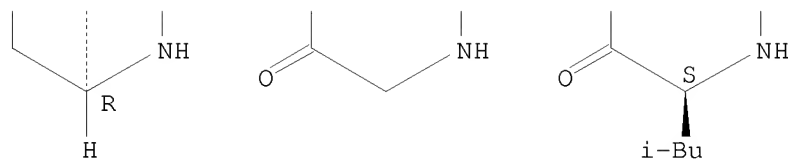
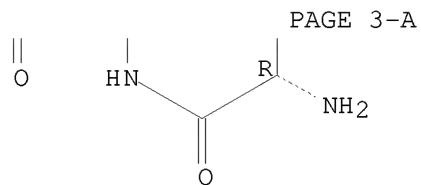
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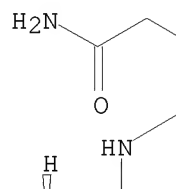


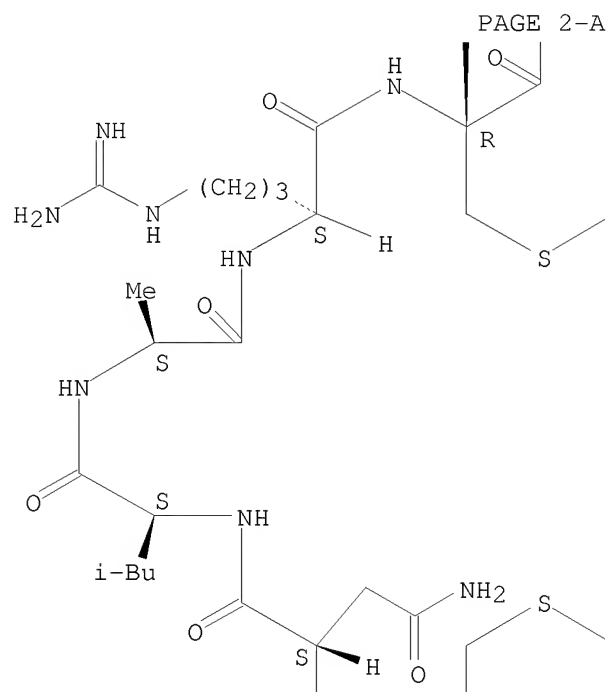
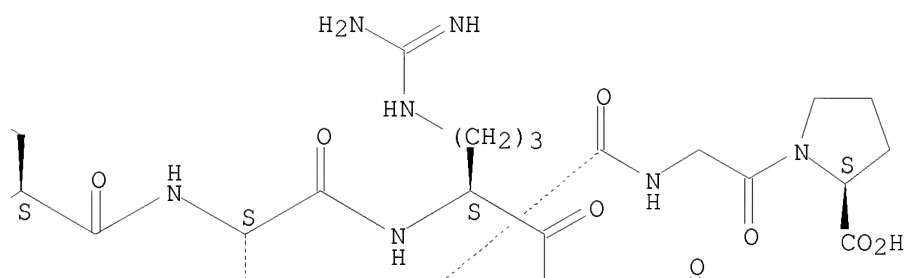
RN 444585-62-0 HCAPLUS
 CN L-Proline, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI)
 (CA INDEX NAME)

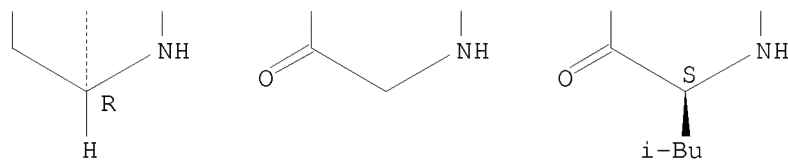
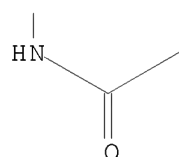
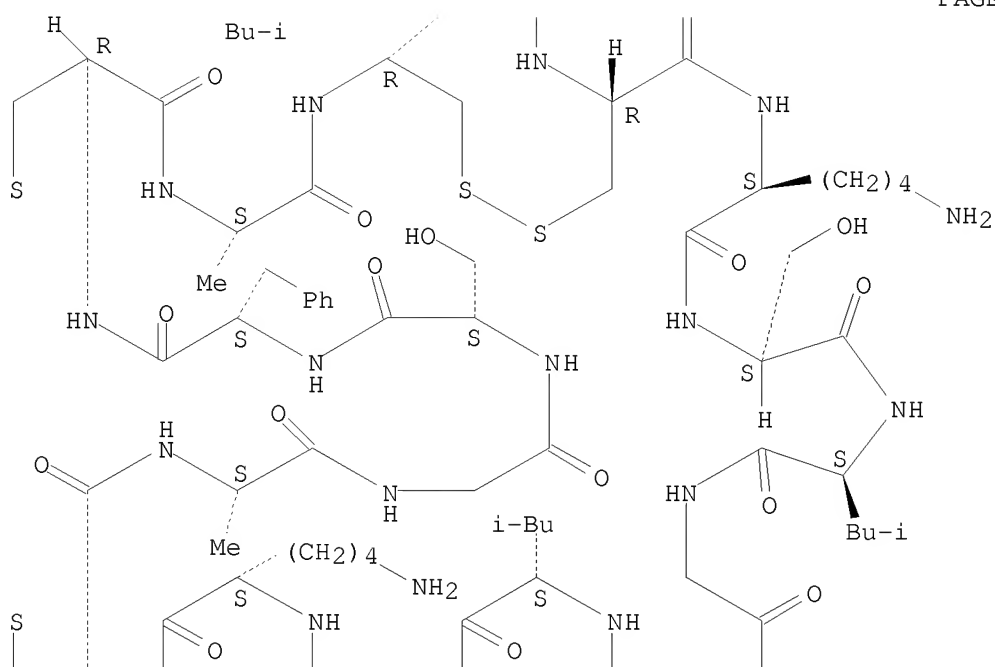
SEQ 1 XNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

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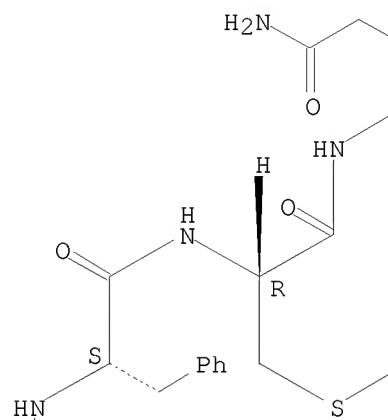


RN 444585-63-1 HCAPLUS
 CN L-Valine, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-alanyl-L-phenylalanyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI)
 (CA INDEX NAME)

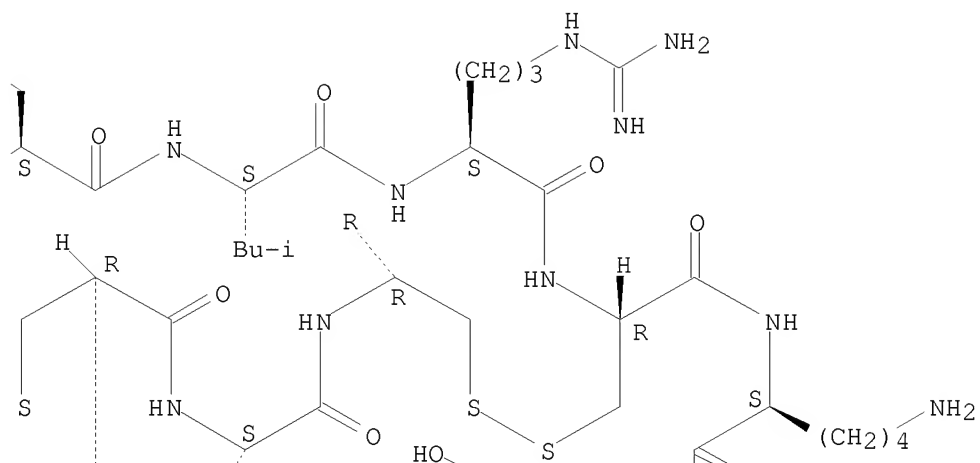
SEQ 1 XNLAFCQLRC KSLGLLGKCA GSFCACV

Absolute stereochemistry.

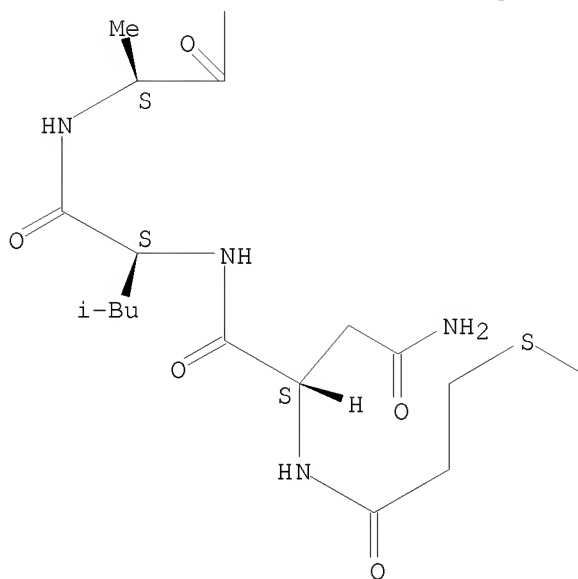
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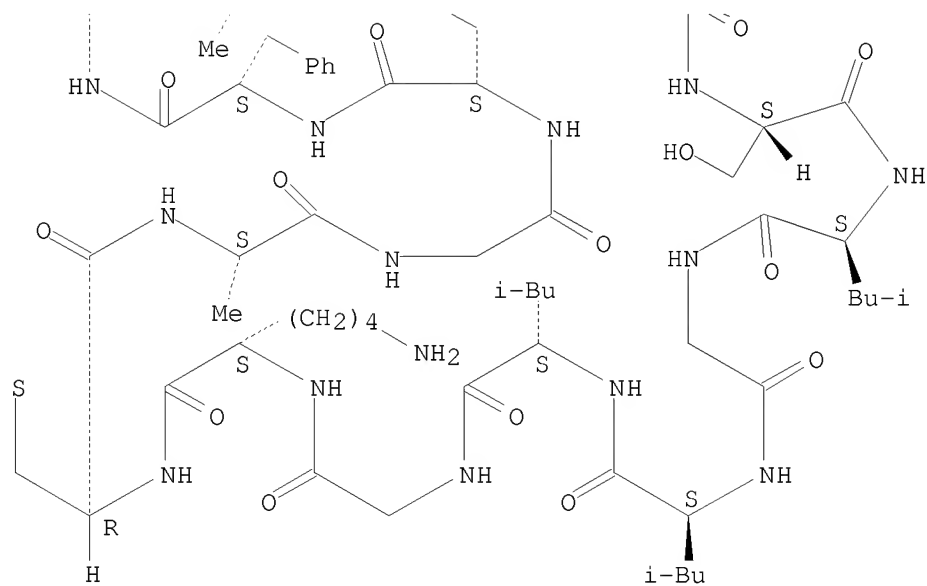
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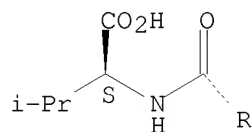
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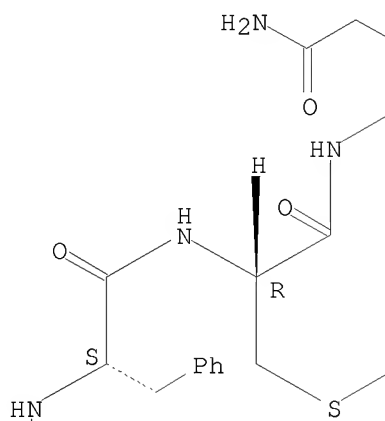
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lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteiny-L-alanyl-L-seryl-L-seryl-L-phenylalanyl-L-cysteiny-L-alanyl-L-cysteiny-L-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI)
(CA INDEX NAME)

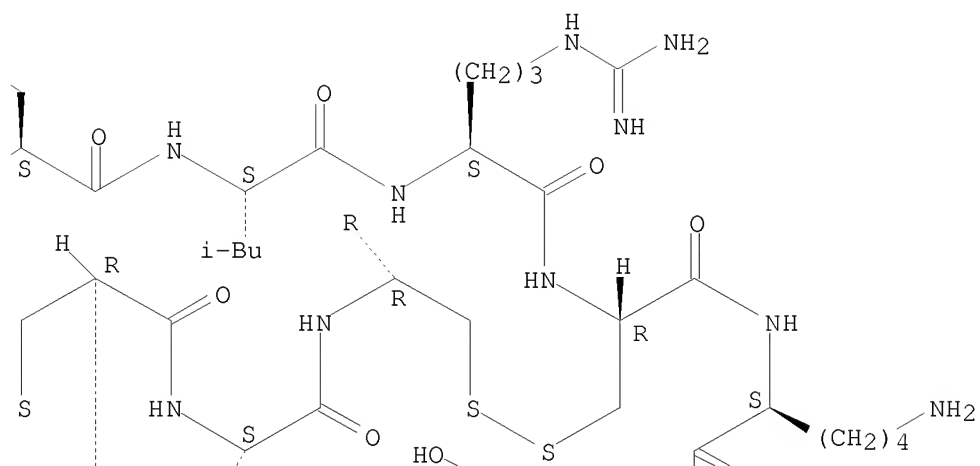
SEQ 1 XNLAFCQLRC KSLGLLGKCA SSFCACV

Absolute stereochemistry.

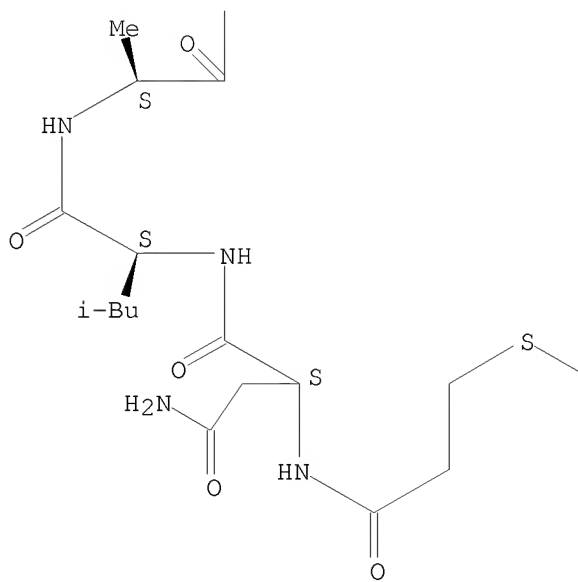
PAGE 1-B

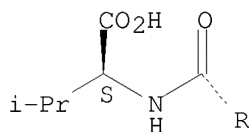
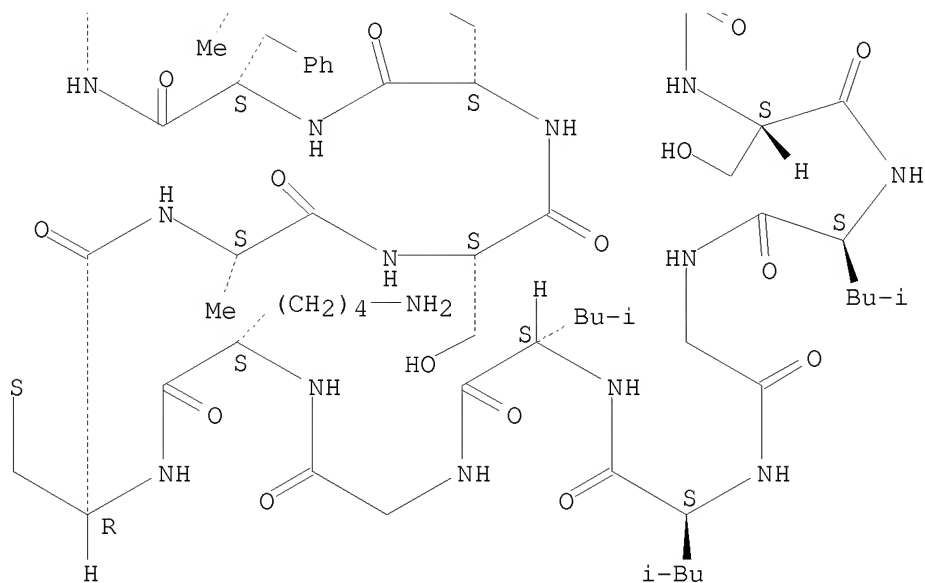


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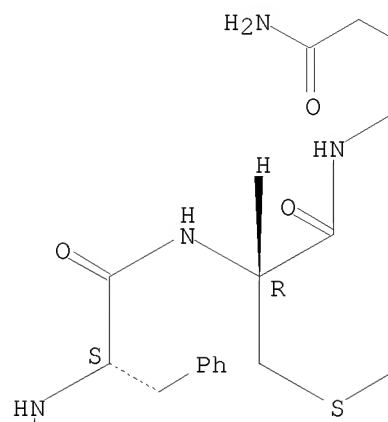


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 (CA INDEX NAME)

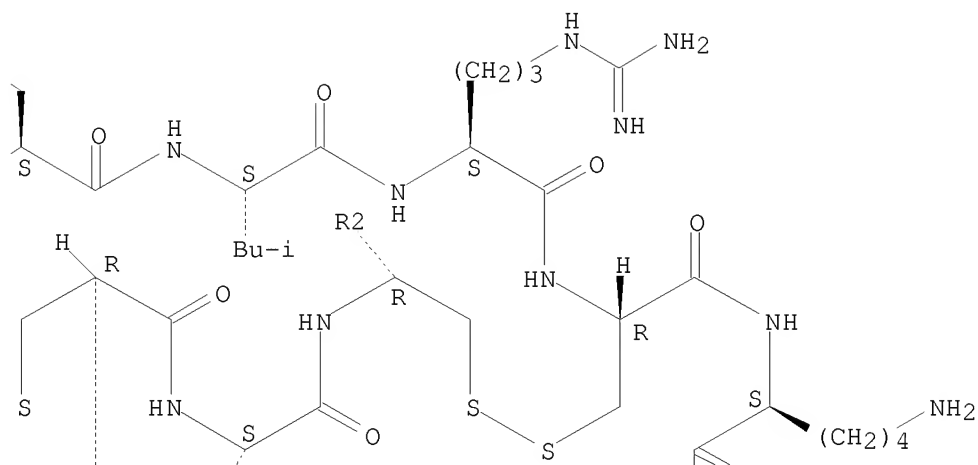
SEQ 1 XNLAFCQLRC KSLGLLGKCA GHFCACV

Absolute stereochemistry.

PAGE 1-A

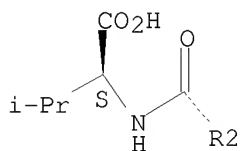
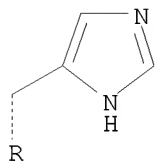


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CC(C)C[C@H](NC(=O)C(=O)NC(=O)C(=O)N)S(=O)(=O)C1=CC=C(C=C1)C(=O)N

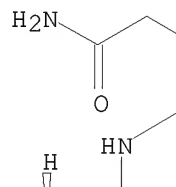
The image displays two chemical structures of cyclic thioureas. The structure on the left is a 12-membered ring containing two sulfur atoms and four carbonyl groups. It features a variety of substituents: a methyl group (Me), a phenyl group (Ph), an R group, an isobutyl group (i-Bu), a 4-aminobutyl group ((CH₂)₄NH₂), and a 2-mercaptoethyl group (CH₂CH₂SH). The structure on the right is a 15-membered ring containing three sulfur atoms and four carbonyl groups. It is substituted with a 2-mercaptoethyl group (CH₂CH₂SH), an isobutyl group (i-Bu), and a 4-aminobutyl group ((CH₂)₄NH₂).

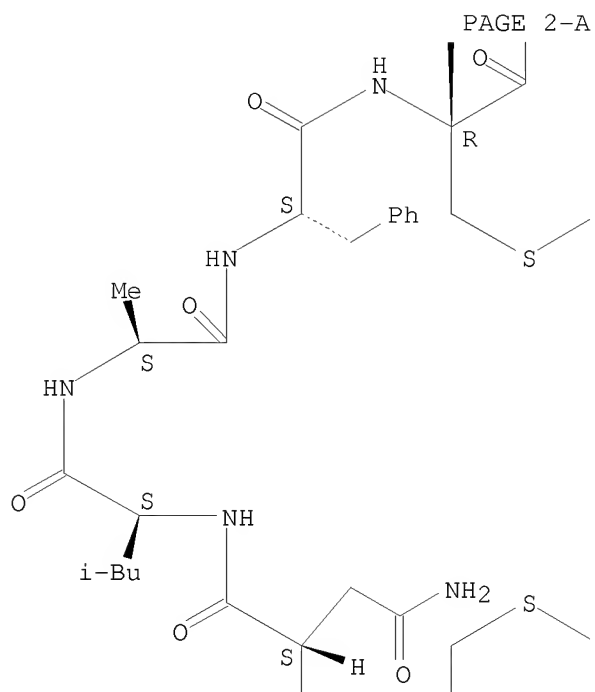
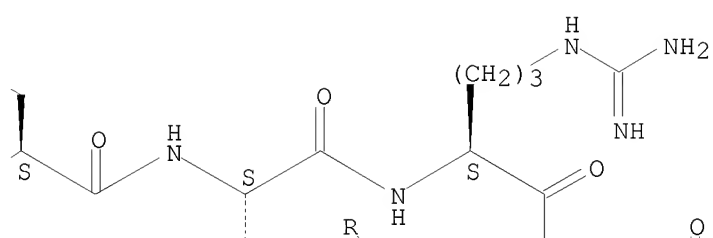


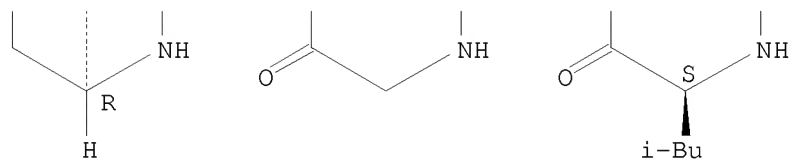
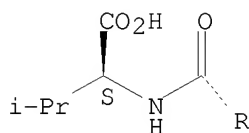
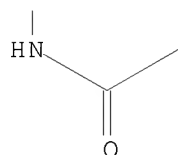
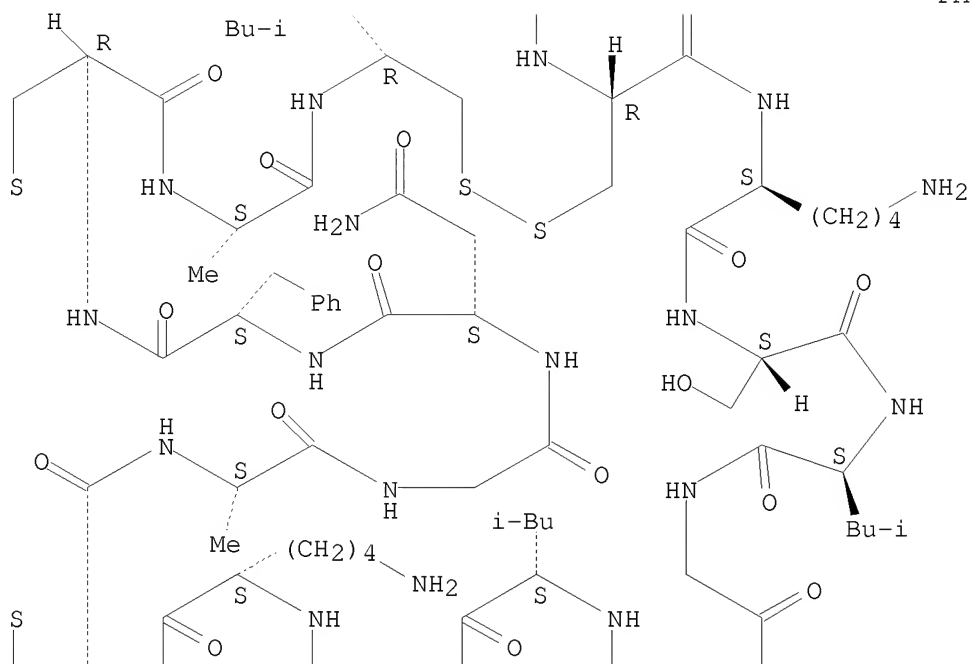
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 (CA INDEX NAME)

SEQ 1 XNLAFCQLRC KSLGLLGKCA GNFCACV

Absolute stereochemistry.







RN 444585-67-5 HCAPLUS

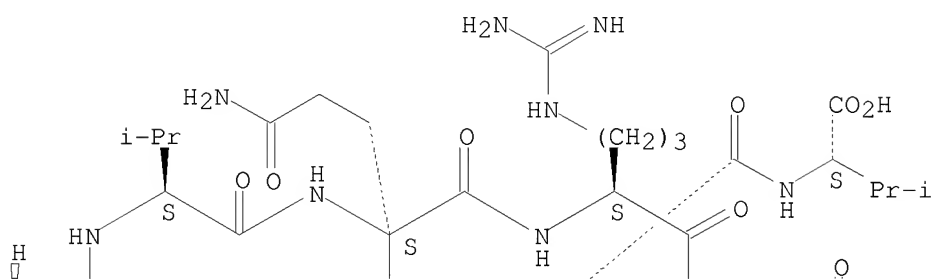
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(CA INDEX NAME)

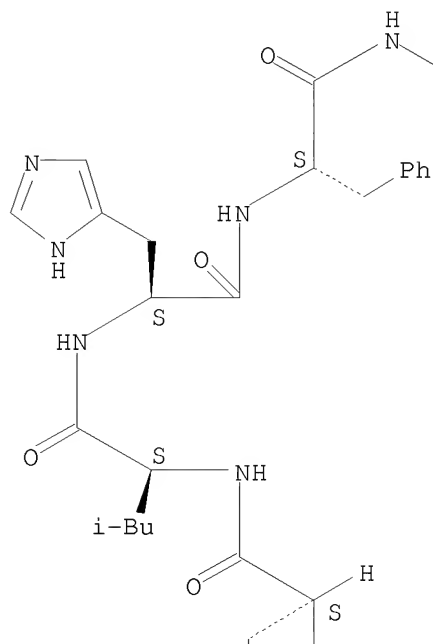
SEQ 1 XNLHFCVQRC HSLGKLGKCA GSFCACV

Absolute stereochemistry.

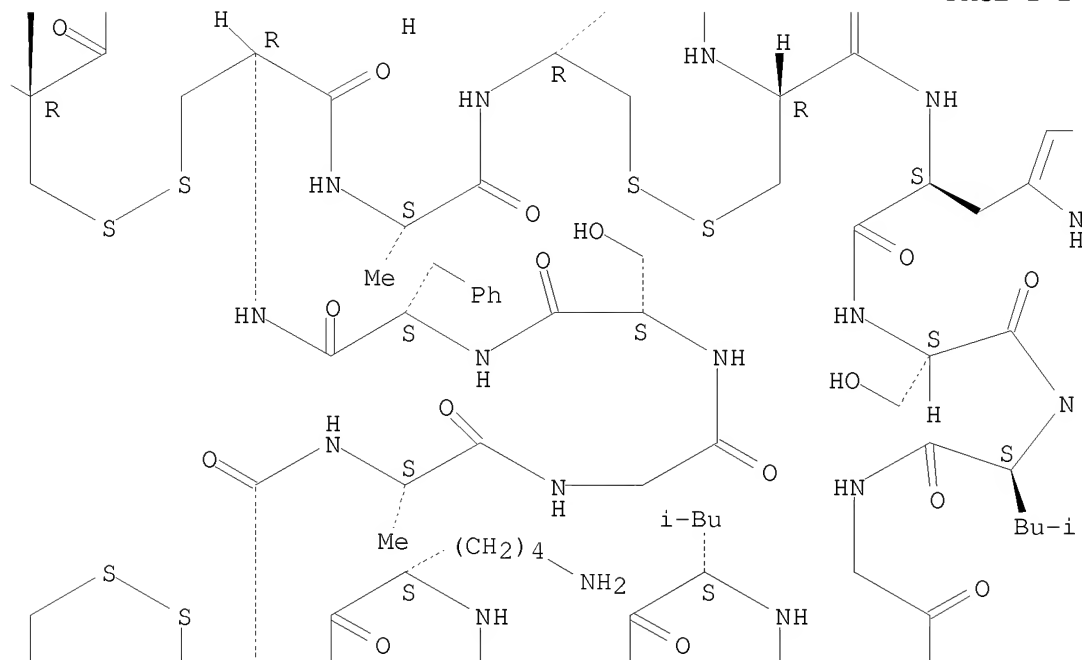
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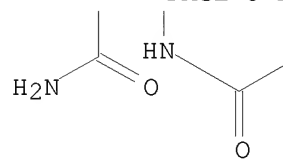


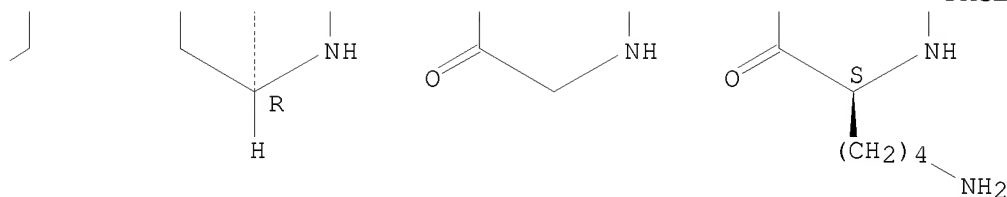
PAGE 2-C



H

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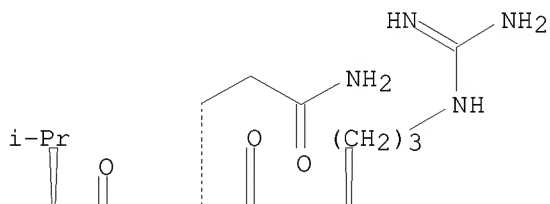


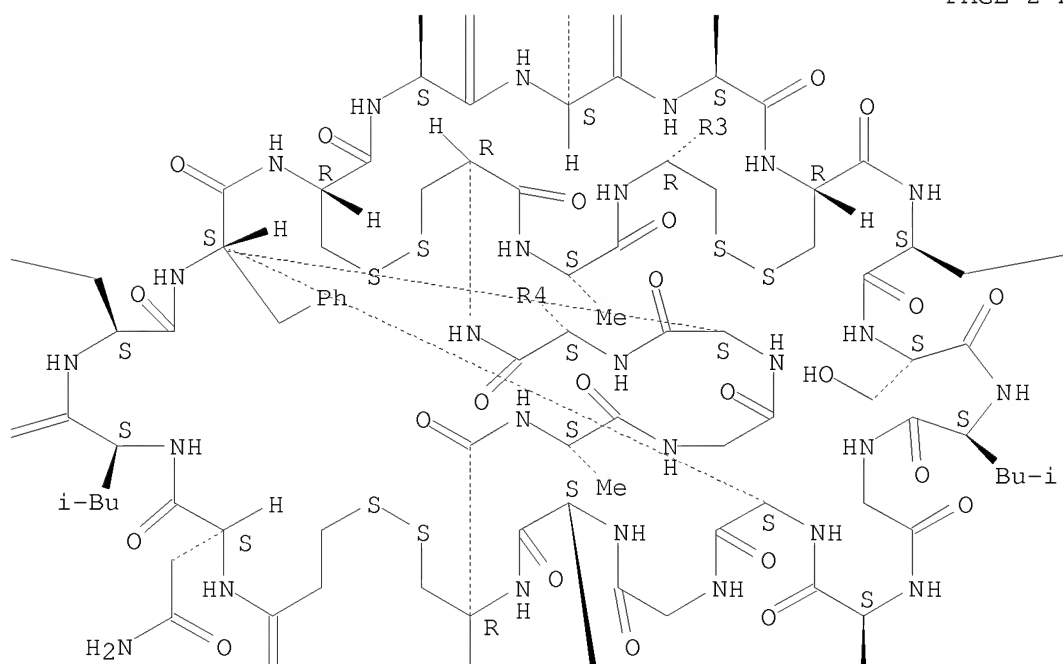
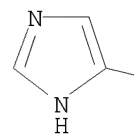
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(CA INDEX NAME)

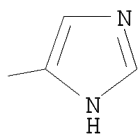
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Absolute stereochemistry.

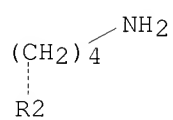
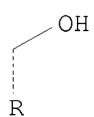




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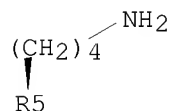
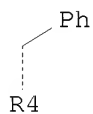
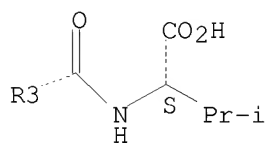


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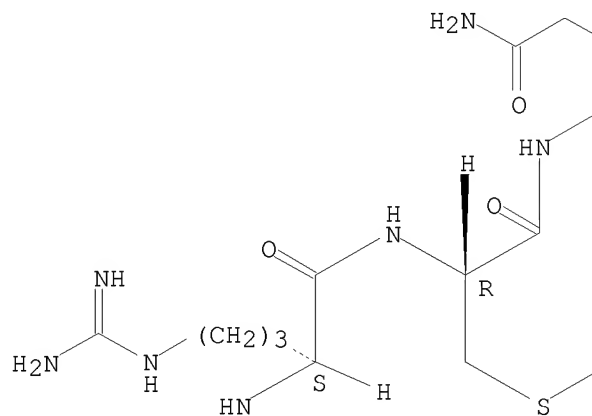




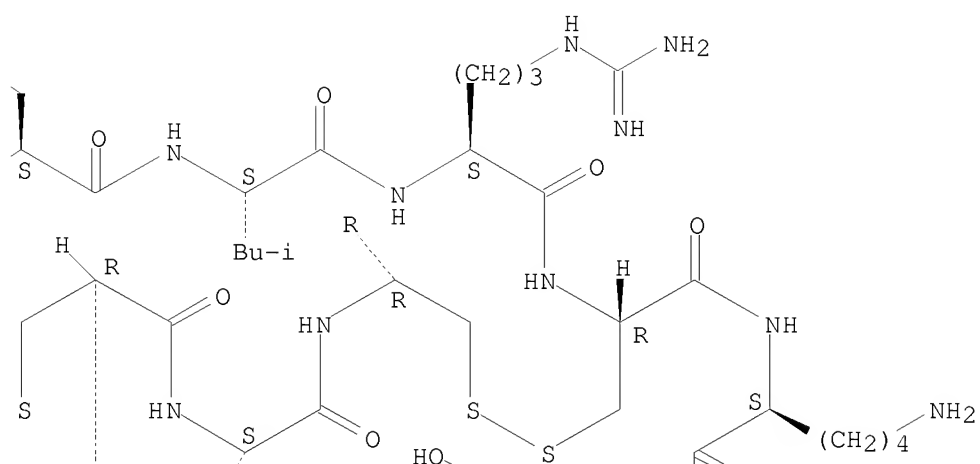
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CN	L-Valine, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminy-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→19), (6→24), (10→26)-tris(disulfide) (9CI) (CA INDEX NAME)	

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACV

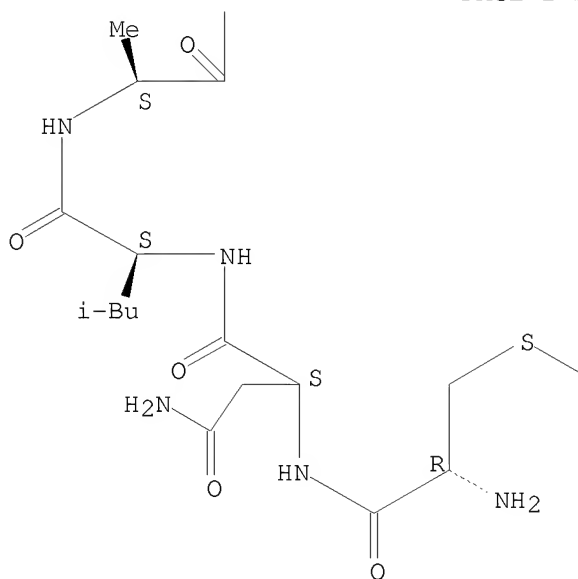
Absolute stereochemistry.

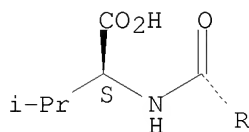
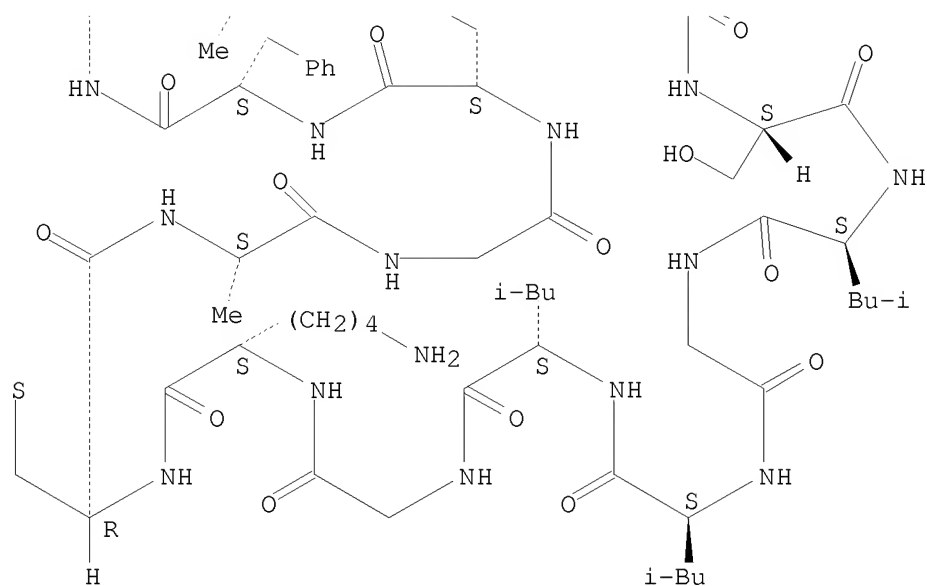


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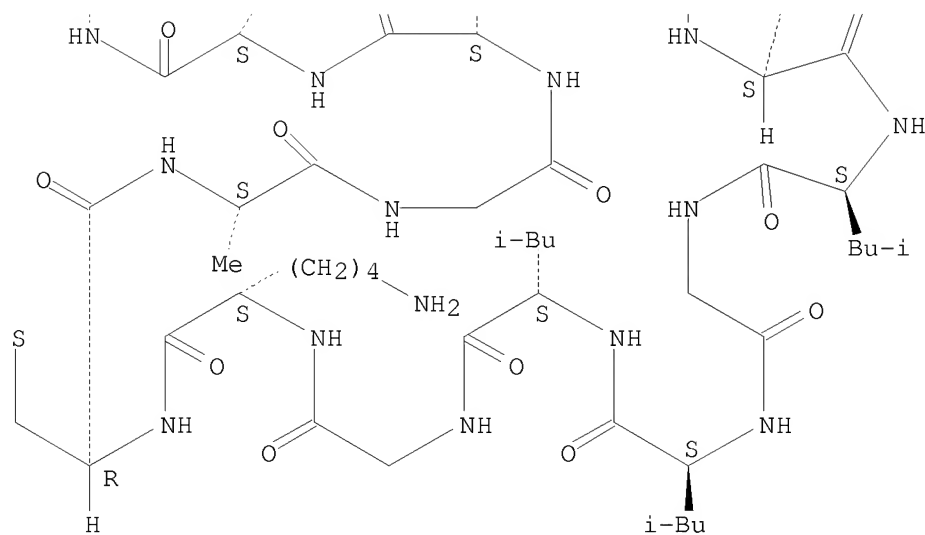
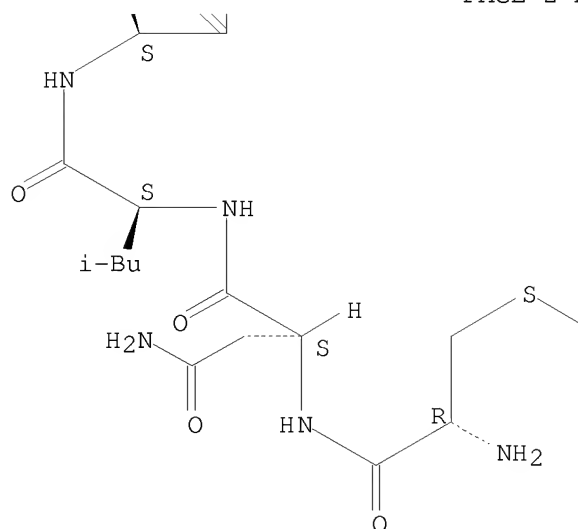




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SEQ 1 CNLARCQLRC KSLGLLGKCA GSACACGP

Absolute stereochemistry.



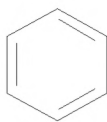
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(CA INDEX NAME)

NTE modified (modifications unspecified)

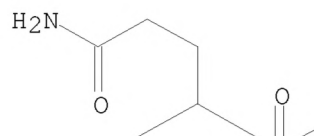
SEQ 1 CNLARCQLRC KSLGLLGKCA GSACACGP

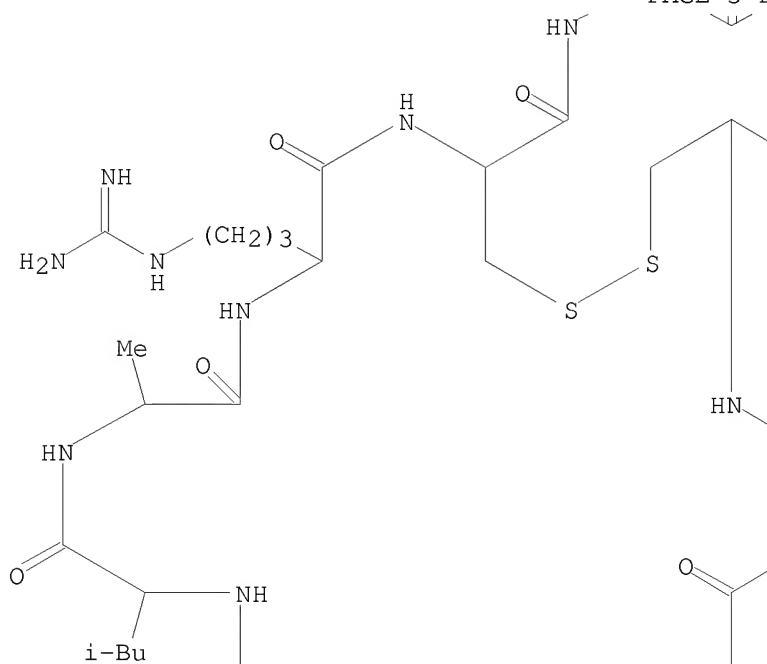
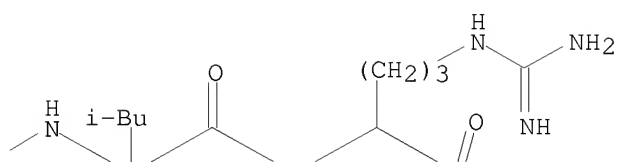
PAGE 1-A



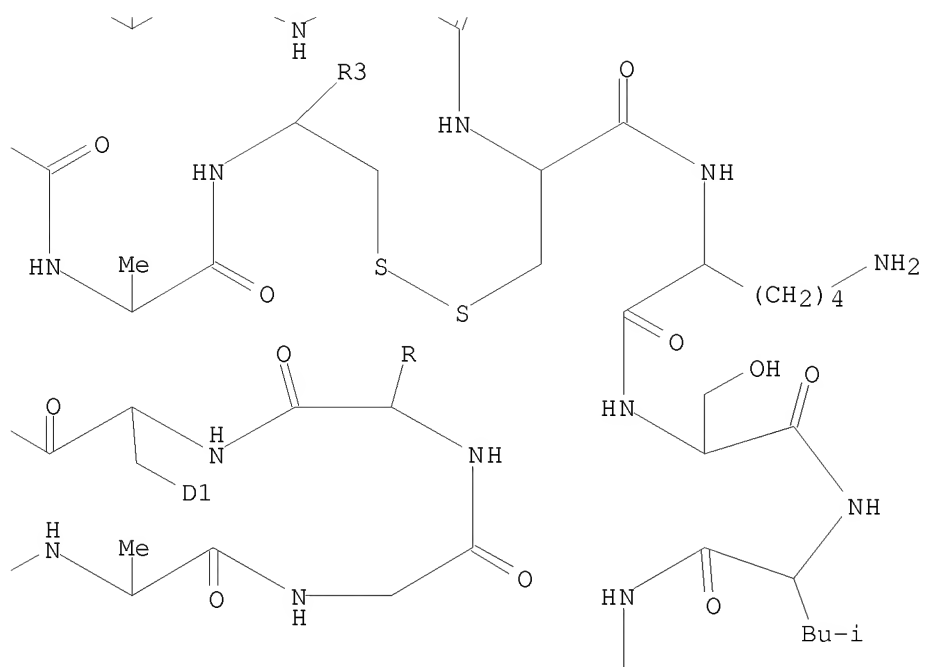
D1—Ph

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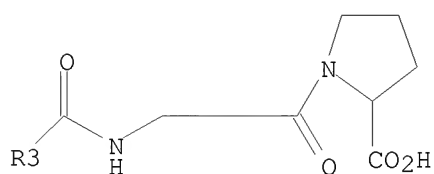
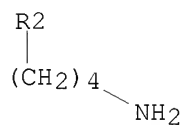
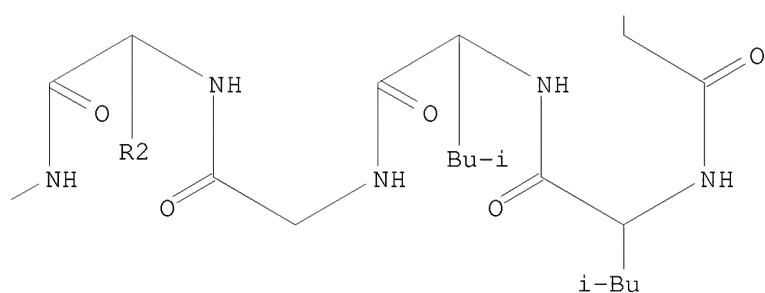
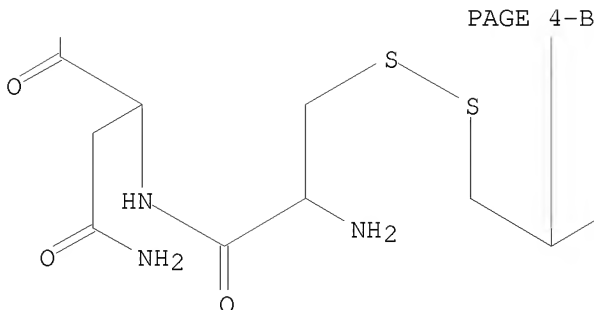


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RN 487065-87-2 HCAPLUS
 CN Peptide, (Cys-Asn-Leu-His-Phe-Cys-Val-Gln-Arg-Cys-His-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 CNLHFCVQRC HSLGLLGKCA GSXCACV

RN 487065-88-3 HCAPLUS
 CN Peptide, (Xaa-Asn-Leu-Gln-Phe-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLQFCQLRC KSLGLLGKCA GSXCACV

RN 487065-90-7 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-Ala-Arg-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLARCQLRC KSLGLLGKCA GSXCACV

RN 487065-91-8 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-His-Phe-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

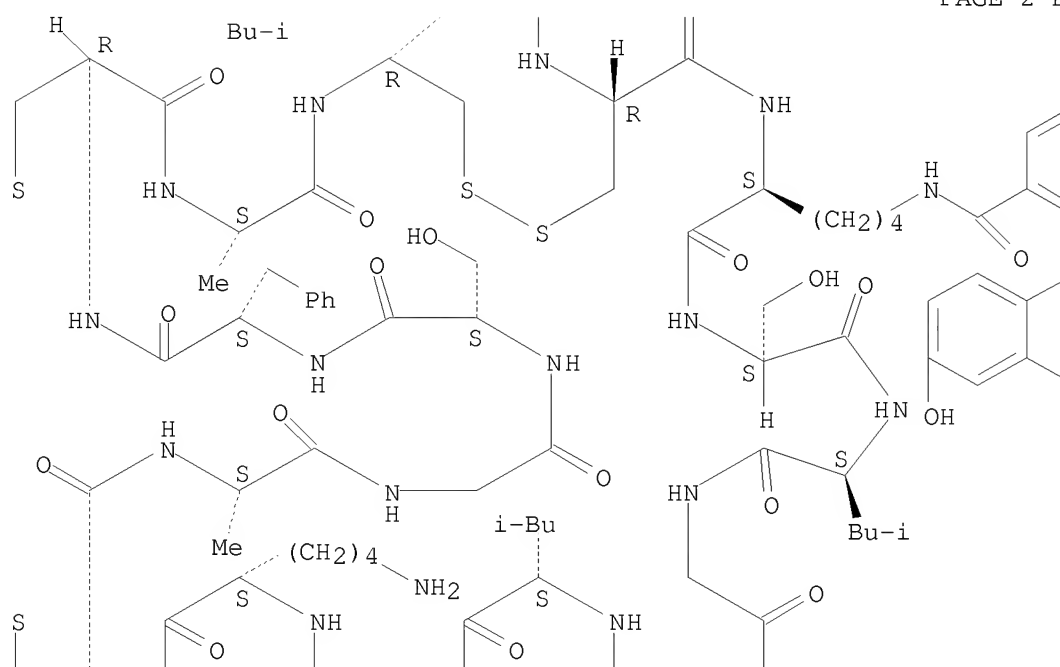
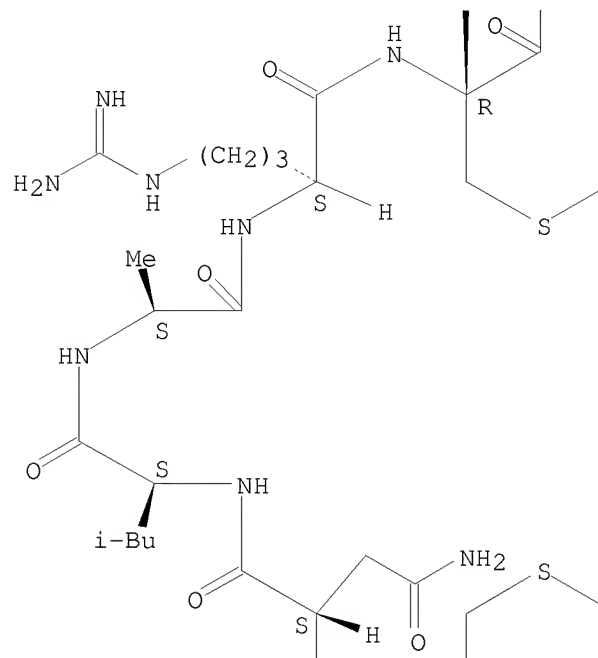
SEQ 1 XNLHFCQLRC KSLGLLGKCA GSXCACV

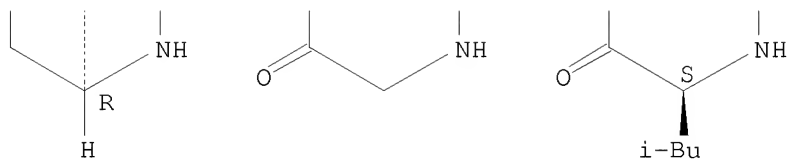
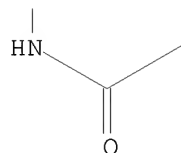
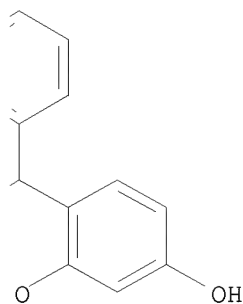
IT 485801-90-9P 485801-92-1P 485801-94-3P
487065-91-8DP, fluoresceinated and biotinylated derivs.
RL: BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(immunodeficiency virus gp120-binding mol. screening method)
RN 485801-90-9 HCAPLUS
CN L-Proline, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-N6-[2-(3,6-dihydroxy-9H-xanthen-9-yl)benzoyl]-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-, cyclic
(1→18), (5→23), (9→25)-tris(disulfide) (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 XNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.





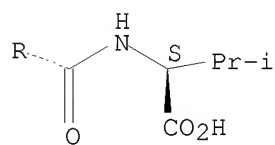
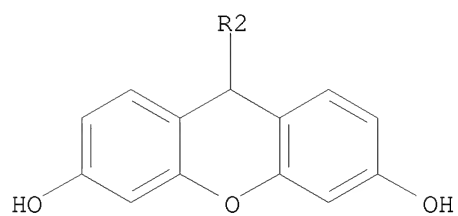
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NTE modified (modifications unspecified)

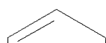
SEQ 1 XNLHFCVQRC HSLGKLGKCA GSFCACV

Absolute stereochemistry.

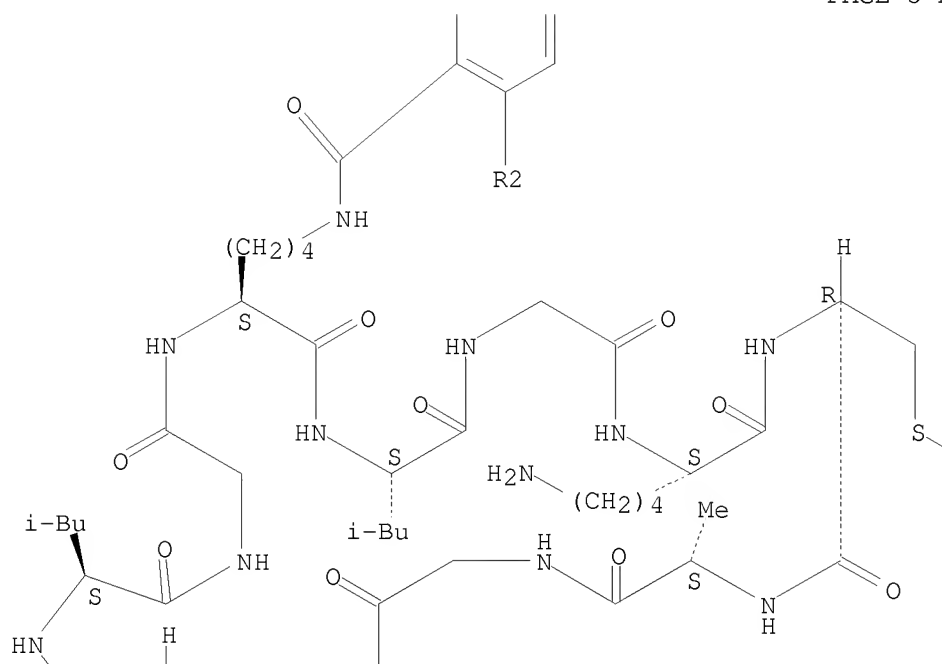
PAGE 1-A



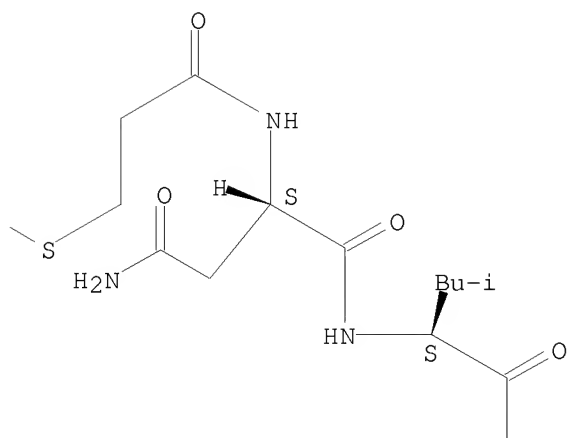
PAGE 4-A

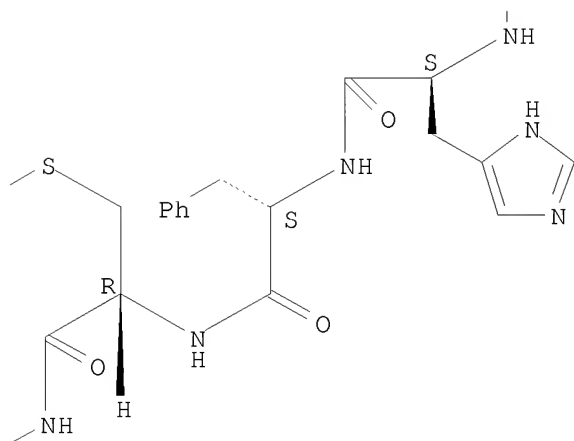
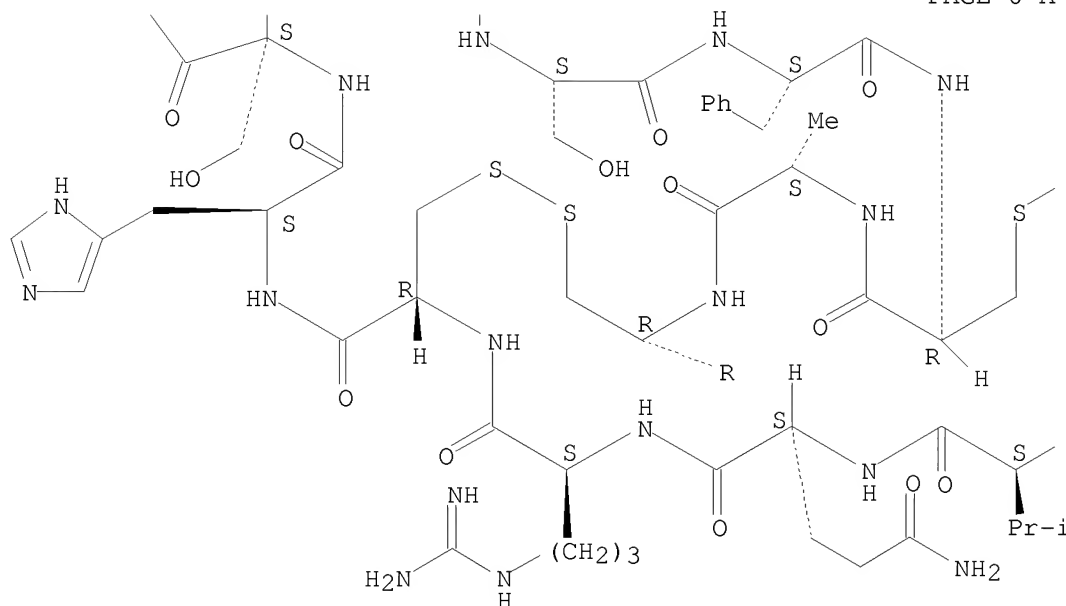


PAGE 5-A



PAGE 5-B





RN 485801-94-3 HCAPLUS
 CN L-Valine, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-valyl-L-glutaminyl-L-arginyl-L-cysteinyl-L-histidyl-L-seryl-L-leucylglycyl-L-leucyl-N6-[2-(3,6-dihydroxy-9H-xanthen-9-yl)benzoyl]-L-lysylglycyl-L-lysyl-L-cysteinyl-L-alanyl-glycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 XNLHFCVQRC HSLGLKGKCA GSFCACV

RN 487065-91-8 HCAPLUS

CN Peptide, (Xaa-Asn-Leu-His-Phe-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLHFCQLRC KSLGLLGKCA GSXCACV

L2 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

IT 491596-19-1

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(CD4 mimic, CD4M33 peptides in developing neutralizing antibodies that inhibits HIV-1 entry)

RN 491596-19-1 HCAPLUS

CN L-Valinamide, N2-(1-thioxopropyl)-L-asparaginyL-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-3-[1,1'-biphenyl]-4-yl-L-alanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (5→23), (9→25)-bis(disulfide) (CA INDEX NAME)

NTE modified

SEQ 1 NLHFCQLRCK SLGLLGKCAG SFCACV

L2 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

IT 473960-25-7P

RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amino acid sequence; chimeric protein comprising virus coat protein and virus receptor for producing antibody and for preventing viral infection)

RN 473960-25-7 HCAPLUS

CN Envelope protein gp120env [506-threonine] (human immunodeficiency virus 1 strain BaL) fusion protein with peptide (synthetic linker) fusion protein with CD4 (antigen) (human M9 domain fragment) fusion protein with peptide (synthetic myc tag) (9CI) (CA INDEX NAME)

SEQ 1 MPMGSLQPLA TLYLLGMLVA SCLGNAEEKL WVTVYYGVPV WKEATTTLFC
51 ASDRKAYDTE VHNVWATHAC VPTDPNPQEV ELKNVTENFN MWKNNMVEQM
101 HEDIISLWDQ SLKPCVKLTP LCVTLNCTDL RNATNGNDTN TTSSSRGMVG
151 GGEMKNCSFN ITTNIRGKVQ KEYALFYKLD IAPIDNNSNN RYRLISCNTS
201 VITQACPKVS FEPIPIHYCA PAGFAILKCK DKKFNGKGPC TNVSTVQCTH
251 GIRPVVSTQL LLNGSLAEEE VVIRSANFAD NAKVIIIVQLN ESVEINCTRP
301 NNNTRKSIHI GPGRAFYTTG EIIGDIRQAH CNLSRAKWND TLNKIVIKLR
351 EQFGNKTIIV KHSSGGDPEI VTHSFNCGGE FFYCNSTQLF NSTWNVTEES
401 NNTVENNTIT LPCRIKQIIN MWQEVGRAMY APPIRGQIRC SSNITGLLLT
451 RDGGPEDNKT EVFRPGGGDM RDNWRSELYK YKVVKIEPLG VAPTKAKRRV
501 VQREKTGSSG GGGSGSGGGG SGGGAAACNL ARCQLRCKSL GLLGKCAGSF
551 CACGPX

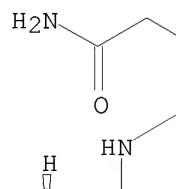
L2 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

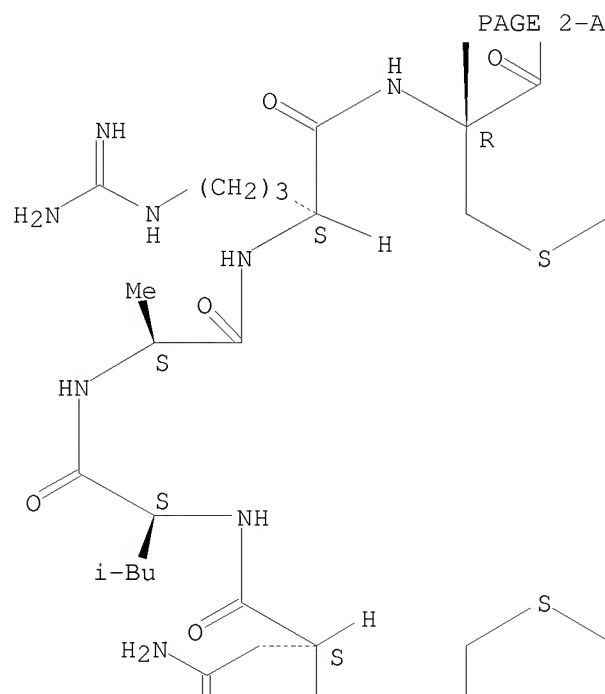
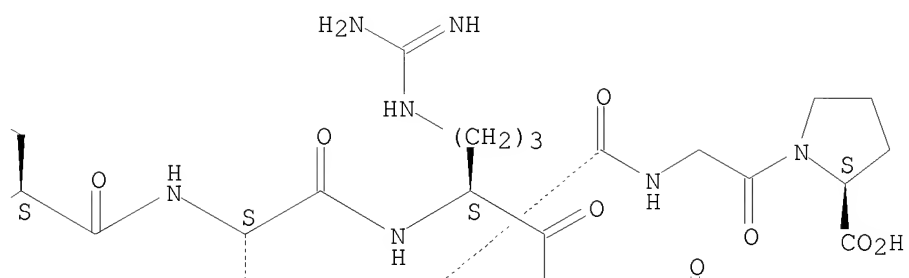
IT 444585-61-9DP, derivs. 444585-72-2P 444889-95-6P
 RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (peptides with affinity for gp120 viral protein, and therapeutic and other use)
 RN 444585-61-9 HCAPLUS
 CN L-Proline, L-cysteinyll-L-asparaginyll-L-leucyl-L-alanyl-L-arginyl-L-cysteinyll-L-glutaminyll-L-leucyl-L-arginyl-L-cysteinyll-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyll-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyll-L-alanyl-L-cysteinyllglycyl-, cyclic (1→19), (6→24), (10→26)-tris(disulfide) (9CI) (CA INDEX NAME)

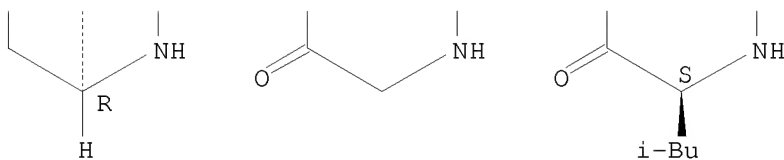
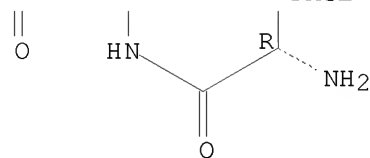
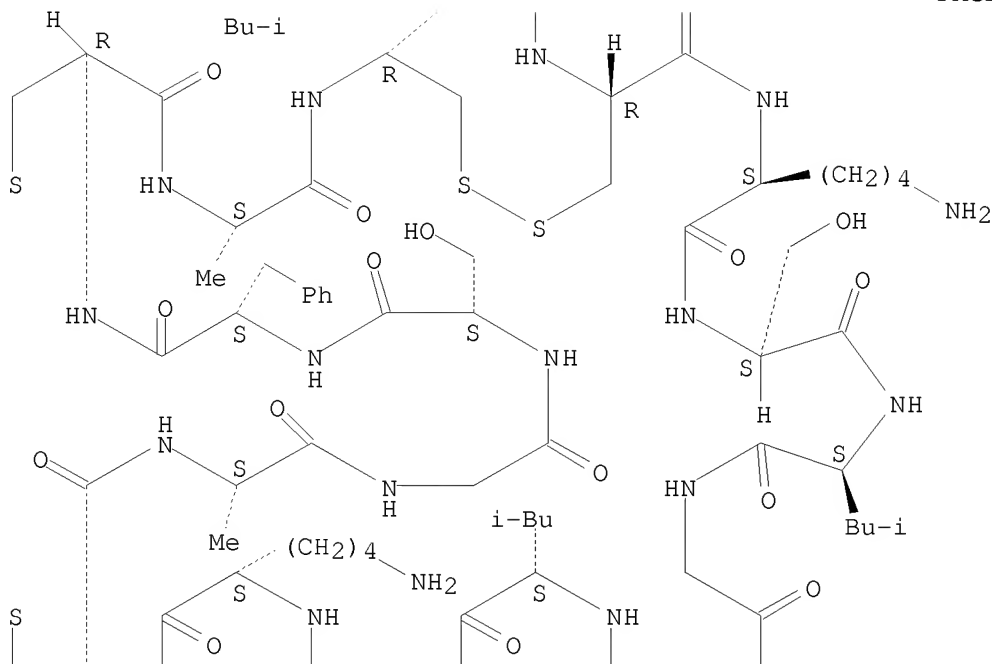
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

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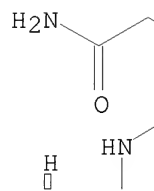
RN 444585-72-2 HCAPLUS
 CN L-Proline, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-alanyl-L-
 arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-N6-[8-[[5-
 [(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-
 oxopentyl]amino]-1,3,6-trioxooctyl]-L-lysyl-L-seryl-L-leucylglycyl-L-
 leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-
 phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-, cyclic
 (1→18), (5→23), (9→25)-tris(disulfide) (9CI) (CA INDEX
 NAME)

NTE modified (modifications unspecified)

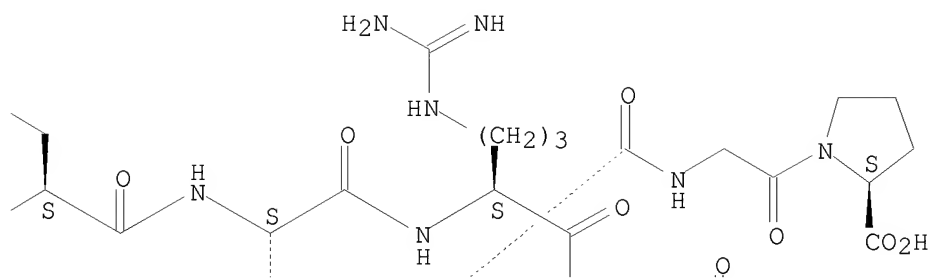
SEQ 1 XNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

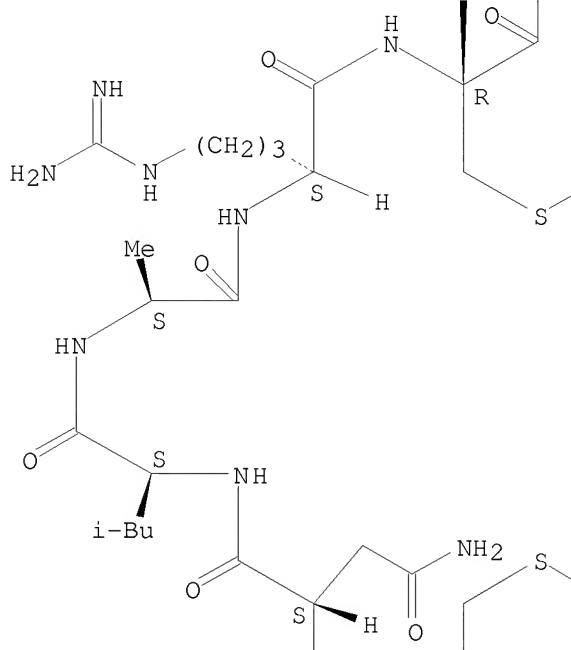
PAGE 1-A



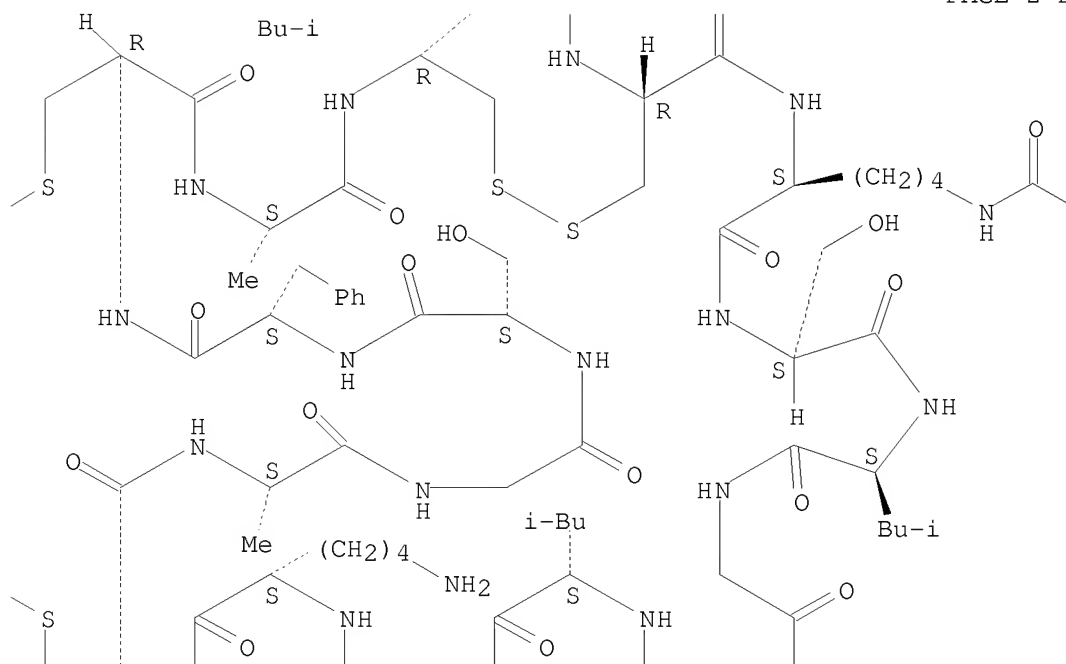
PAGE 1-B

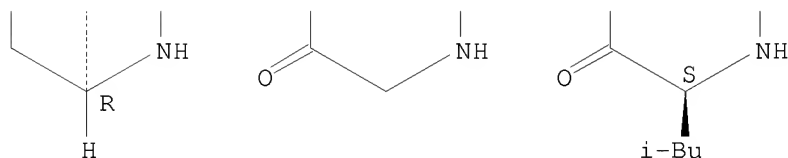
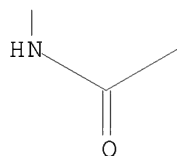
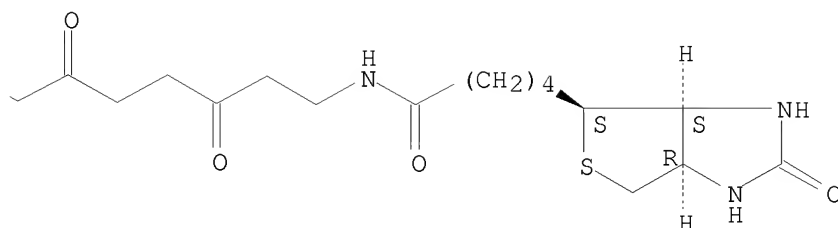


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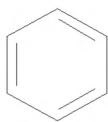


RN 444889-95-6 HCAPLUS
 CN L-Valine, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-glutamyl-L-leucyl-L-arginyl-L-cysteinyl-N6-[8-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1,3,6-trioxooctyl]-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-3-[1,1'-biphenyl]ylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

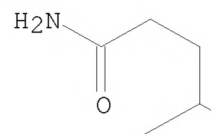
SEQ 1 XNLHFCQLRC KSLGLLGKCA GSFCACV

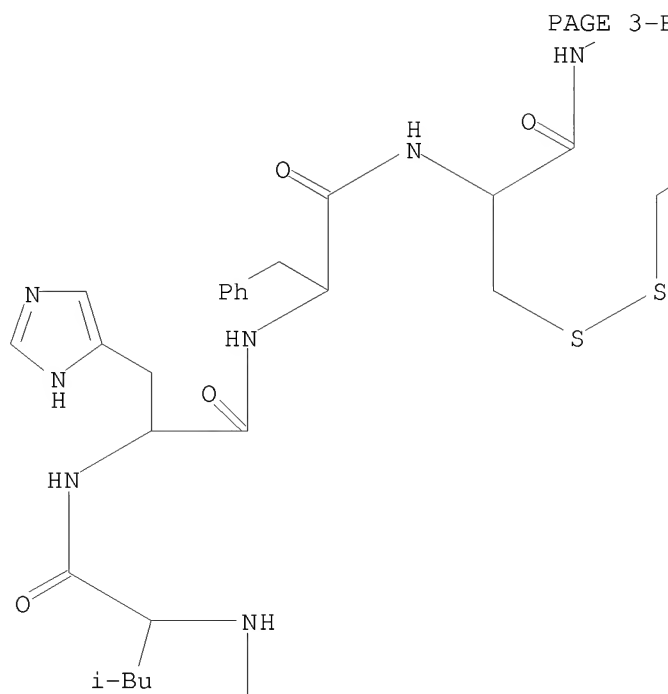
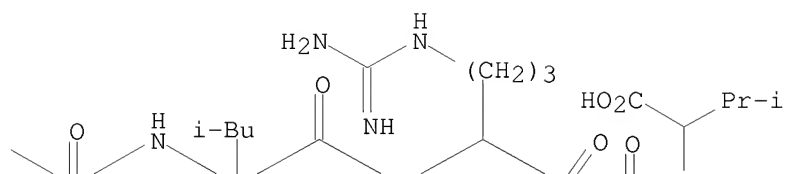
PAGE 1-A

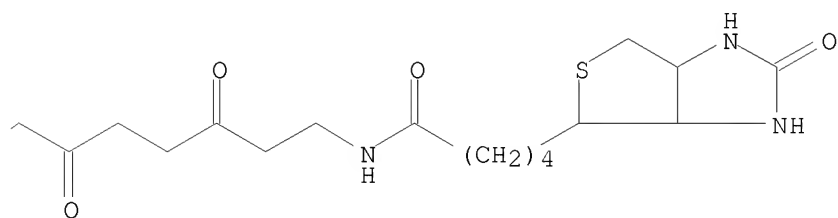
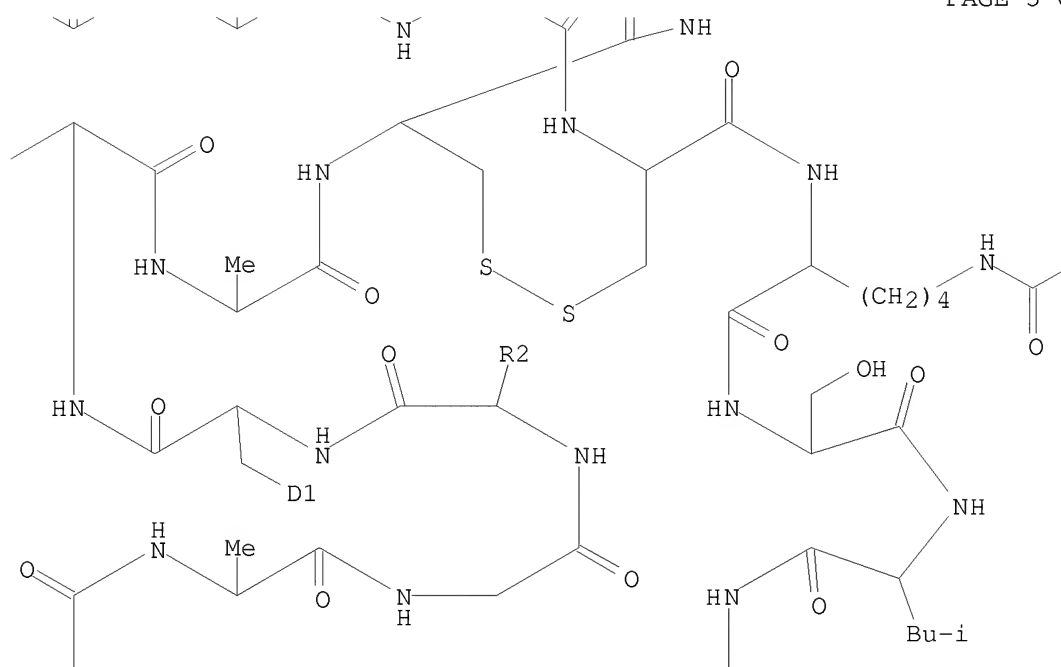


D1—Ph

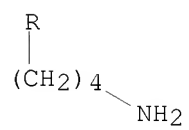
PAGE 2-B



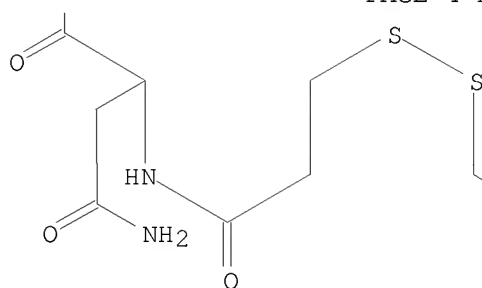




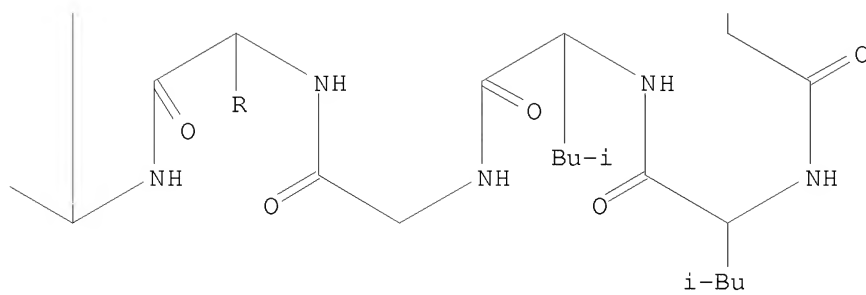
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444585-65-3P 444585-66-4P 444585-67-5P
444585-68-6P 444889-90-1P 444889-91-2P
444889-92-3P 444889-93-4P 445313-53-1P

RL: BUU (Biological use, unclassified); DGN (Diagnostic use); PAC
(Pharmacological activity); PRP (Properties); SPN (Synthetic preparation);
THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(peptides with affinity for gp120 viral protein, and therapeutic and
other use)

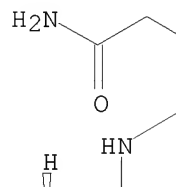
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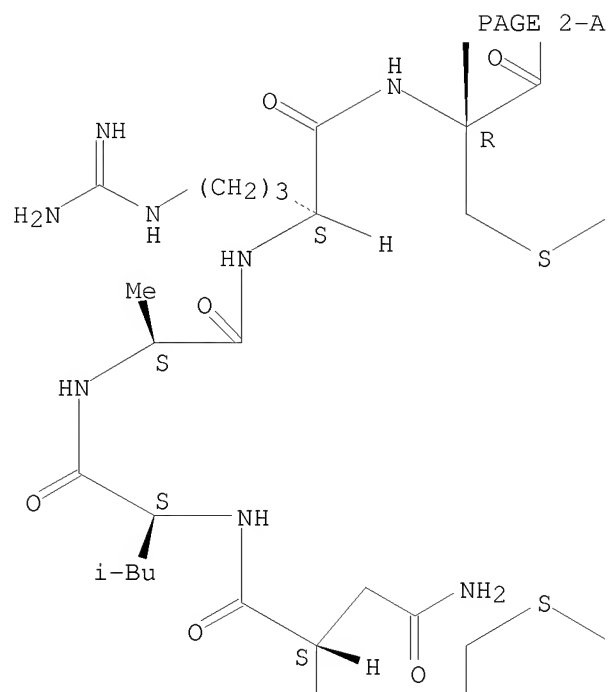
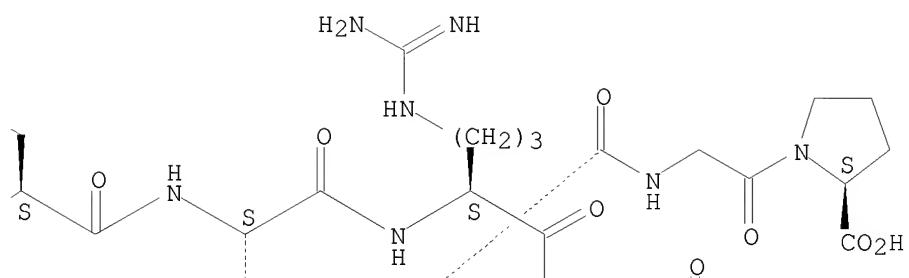
CN L-Proline, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-alanyl-L-
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seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-
alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-
, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI)
(CA INDEX NAME)

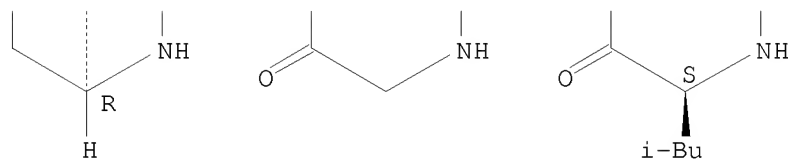
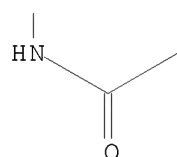
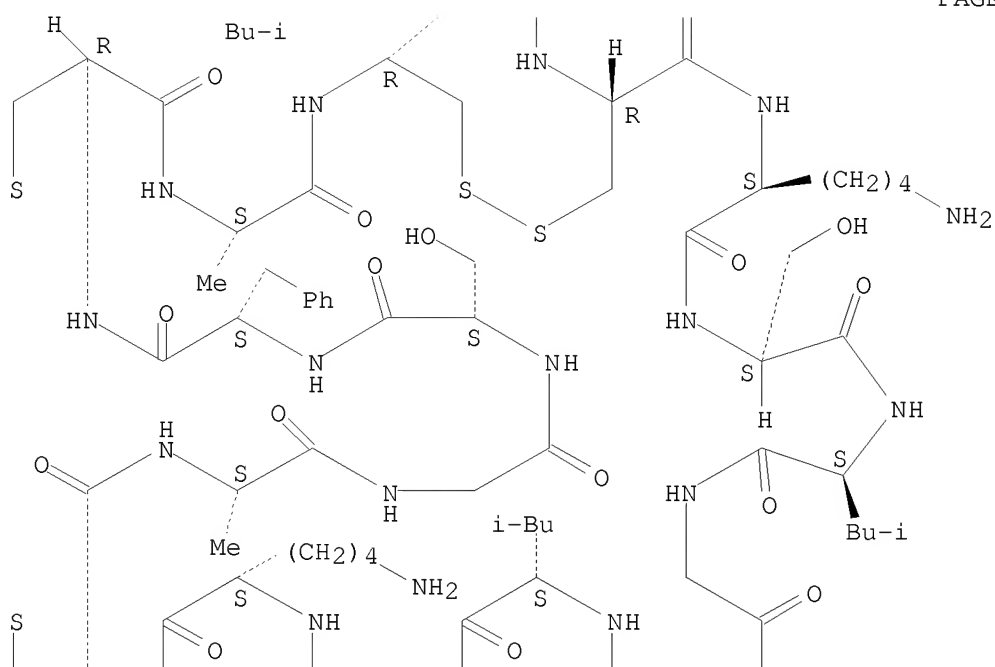
SEQ 1 XNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

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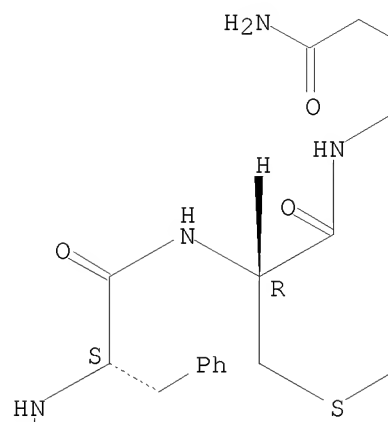


RN 444585-63-1 HCAPLUS
 CN L-Valine, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-alanyl-L-phenylalanyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI)
 (CA INDEX NAME)

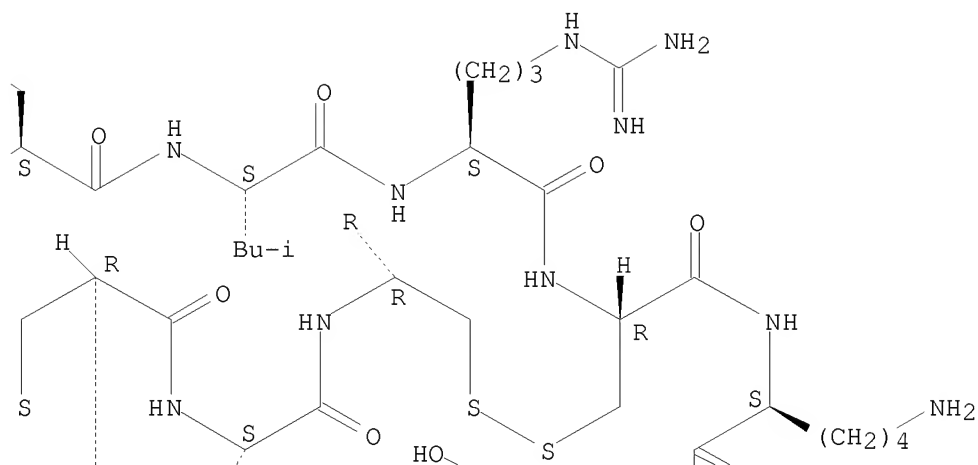
SEQ 1 XNLAFCQLRC KSLGLLGKCA GSFCACV

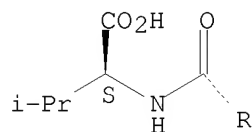
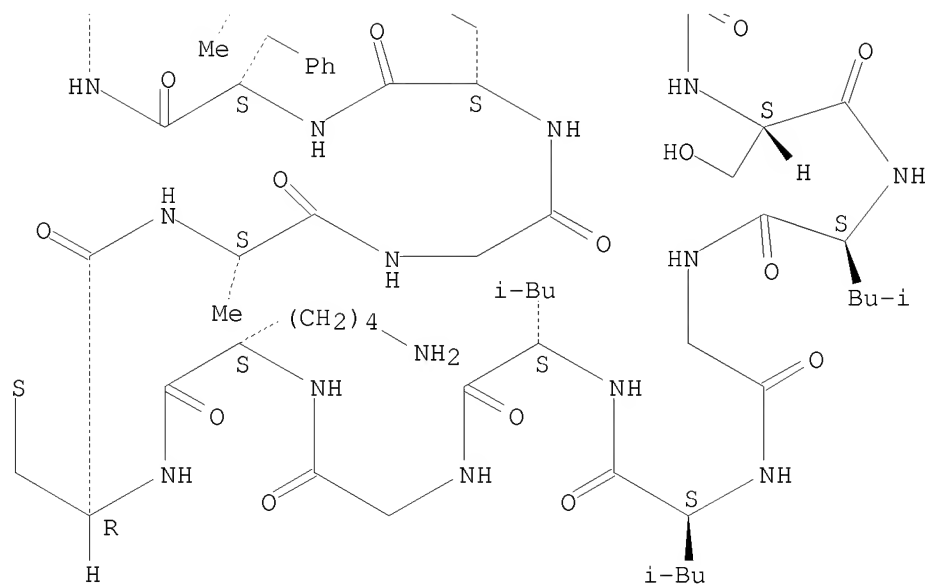
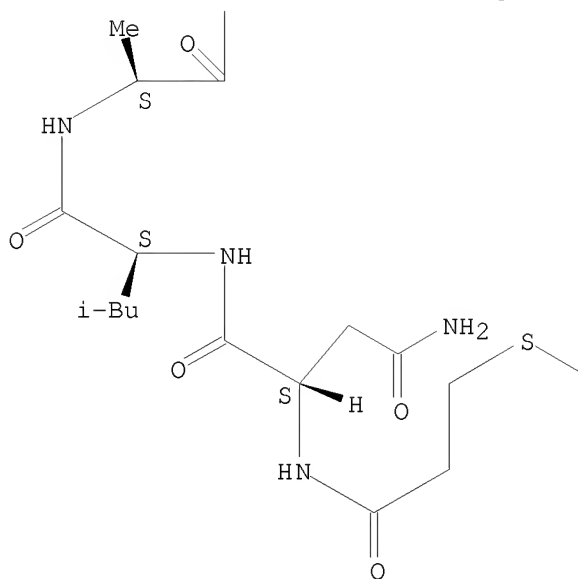
Absolute stereochemistry.

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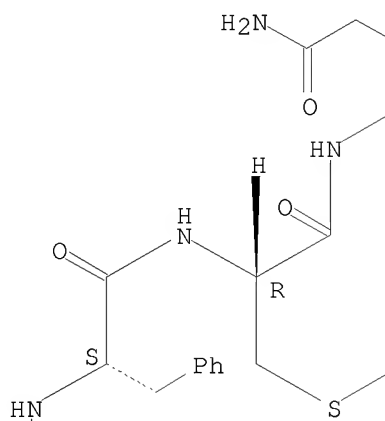
RN 444585-64-2 HCAPLUS
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lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteiny-L-
alanyl-L-seryl-L-seryl-L-phenylalanyl-L-cysteiny-L-alanyl-L-cysteiny-L-,
cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI)
(CA INDEX NAME)

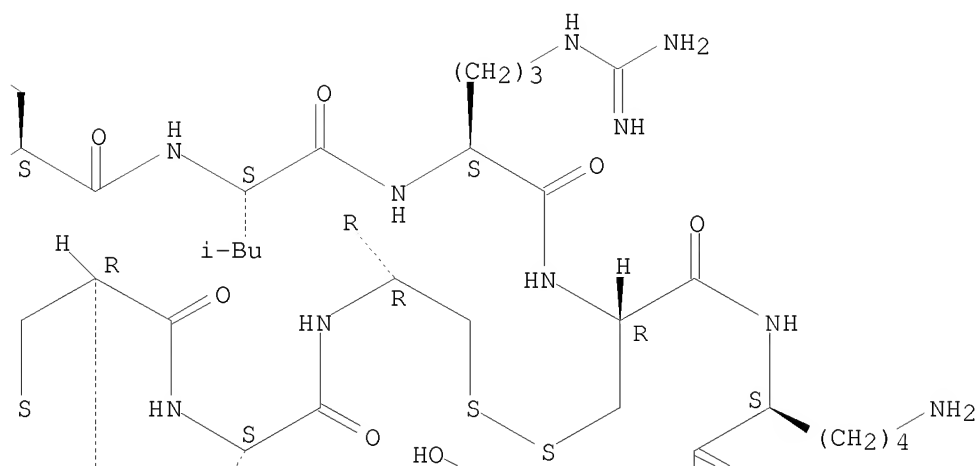
SEQ 1 XNLAFCQLRC KSLGLLGKCA SSFCACV

Absolute stereochemistry.

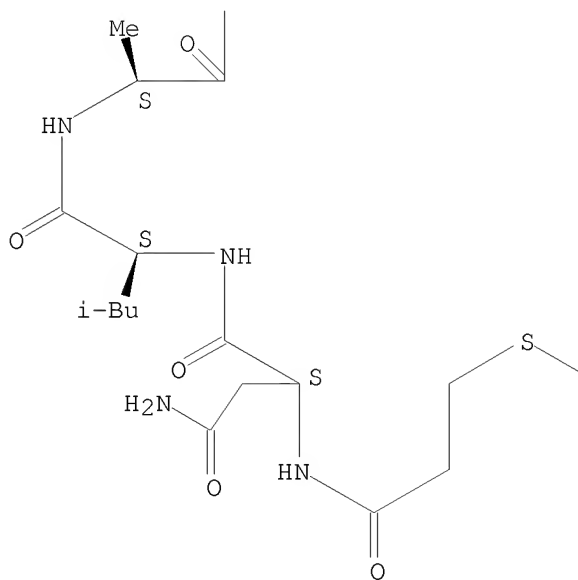
PAGE 1-B

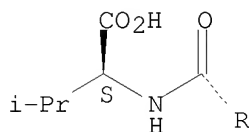
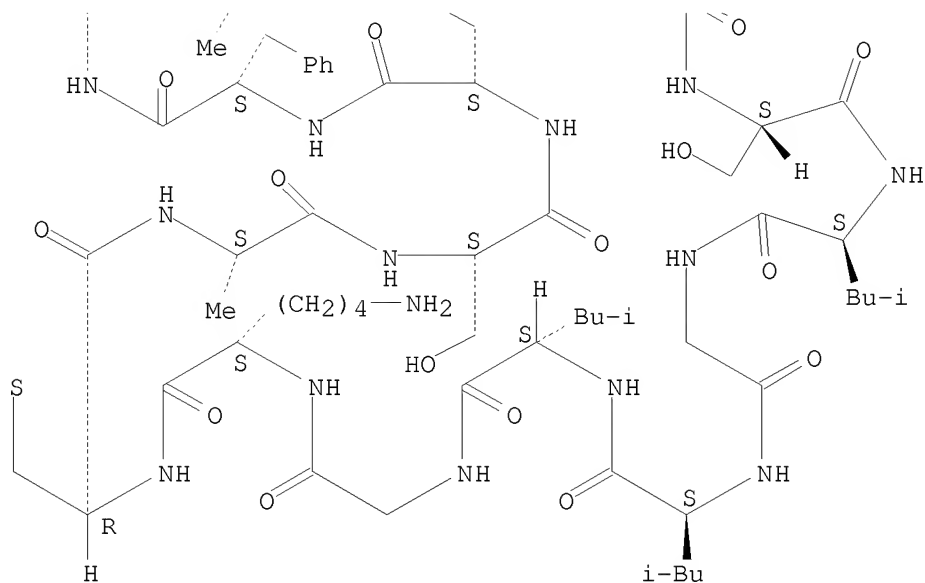


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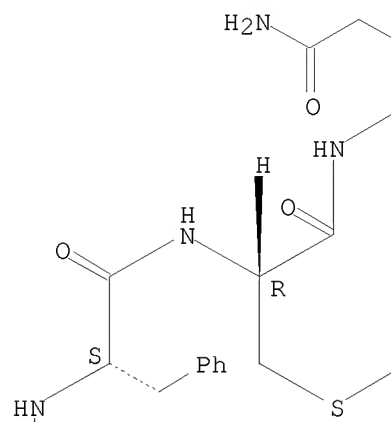


RN 444585-65-3 HCAPLUS
 CN L-Valine, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-alanyl-L-phenylalanyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI)
 (CA INDEX NAME)

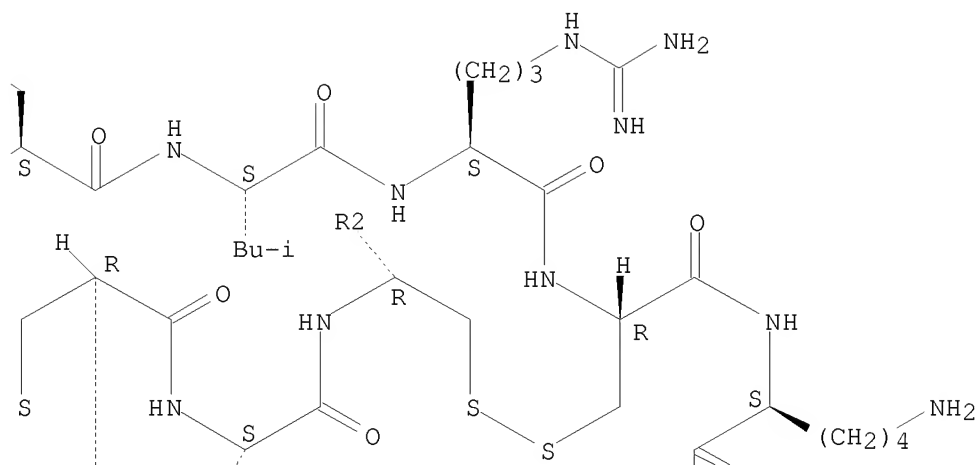
SEQ 1 XNLAFCQLRC KSLGLLGKCA GHFCACV

Absolute stereochemistry.

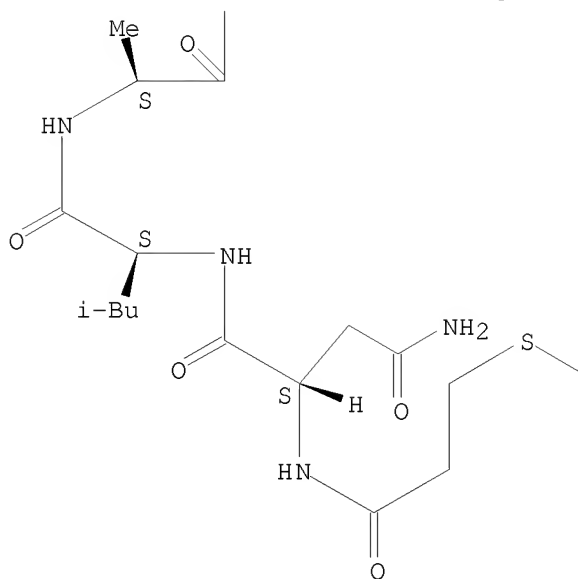
PAGE 1-A



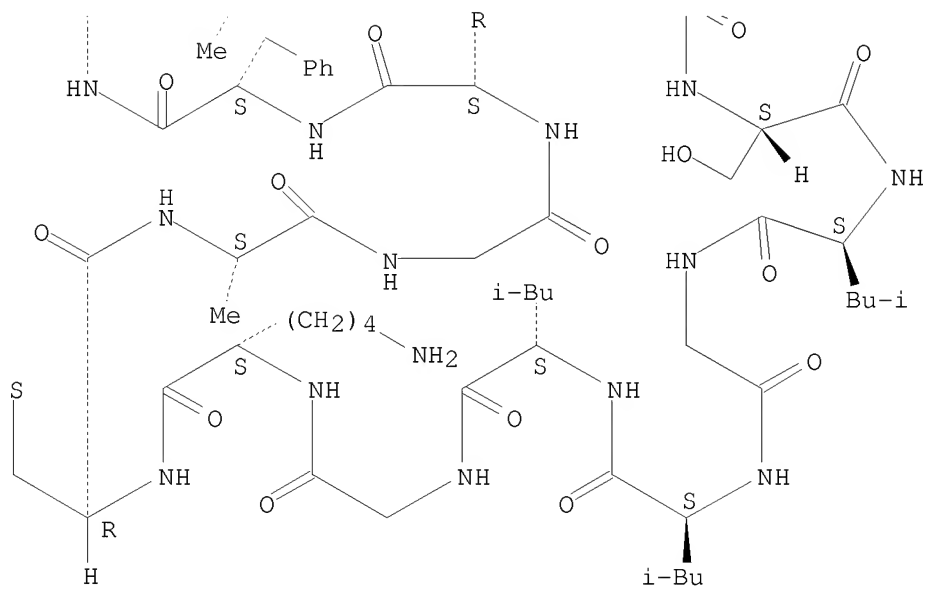
PAGE 1-B

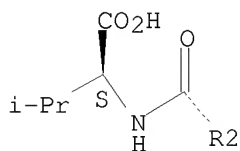
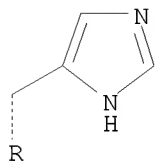


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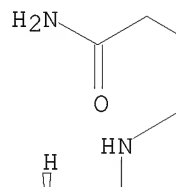


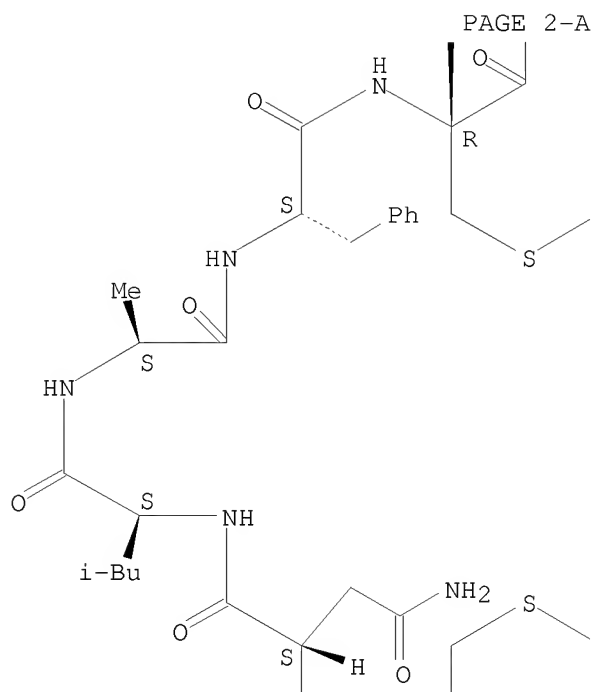
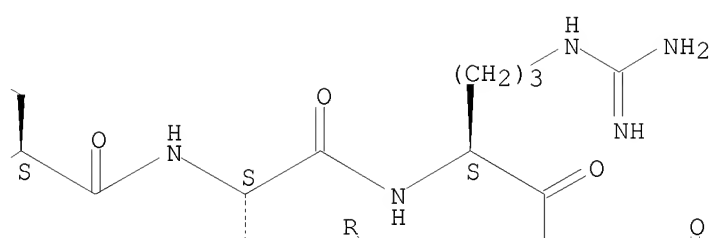


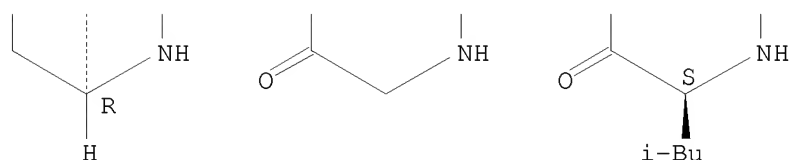
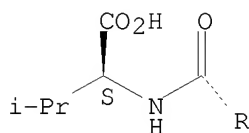
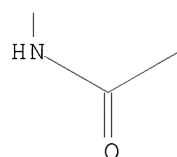
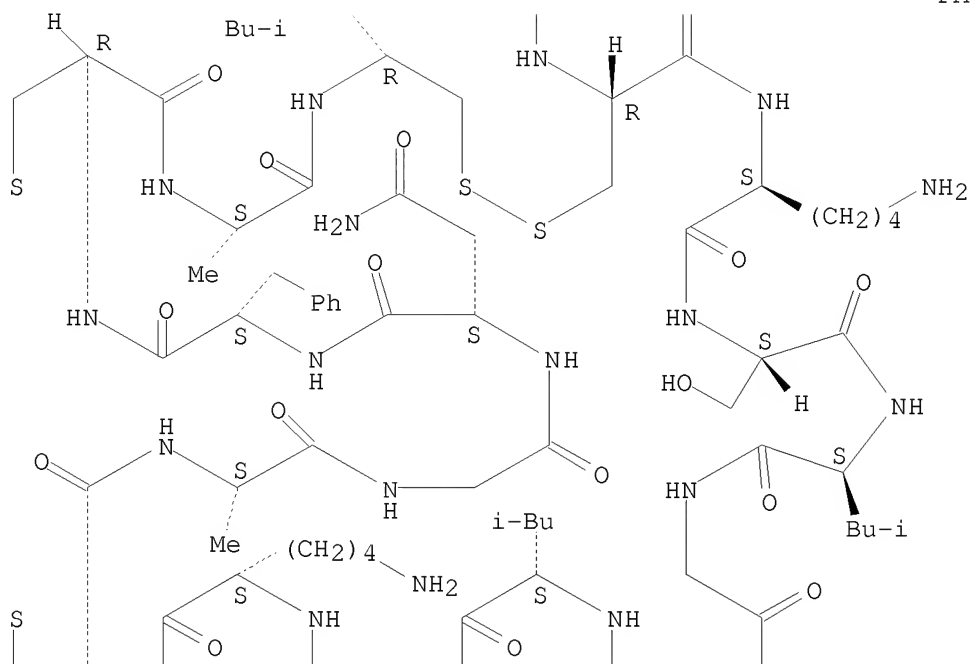
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 CN L-Valine, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-alanyl-L-phenylalanyl-L-cysteinyl-L-glutamyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-asparaginyl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI)
 (CA INDEX NAME)

SEQ 1 XNLAFCQLRC KSLGLLGKCA GNFCACV

Absolute stereochemistry.







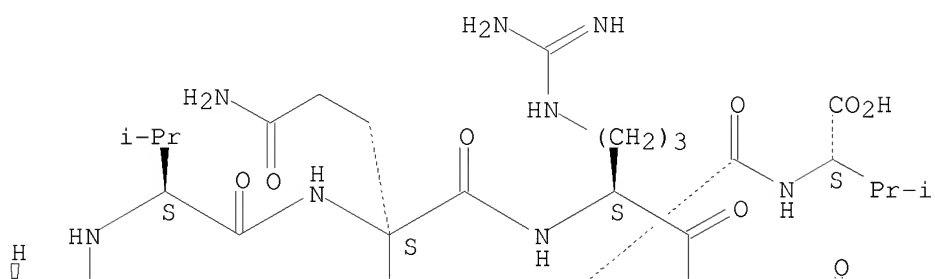
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 CN L-Valine, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-valyl-L-glutamyl-L-arginyl-L-cysteinyl-L-histidyl-L-seryl-L-leucylglycyl-L-lysyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI)

(CA INDEX NAME)

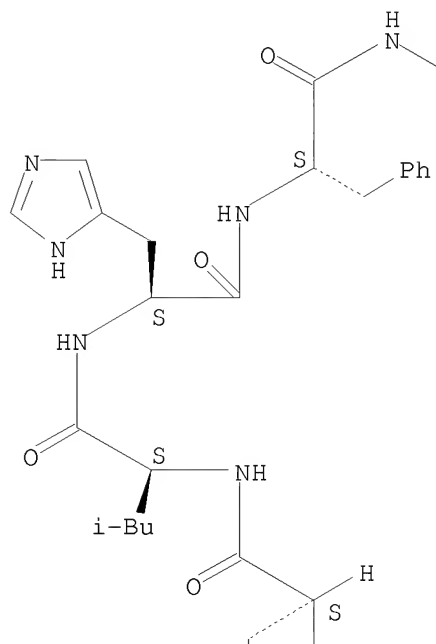
SEQ 1 XNLHFCVQRC HSLGKLGKCA GSFCACV

Absolute stereochemistry.

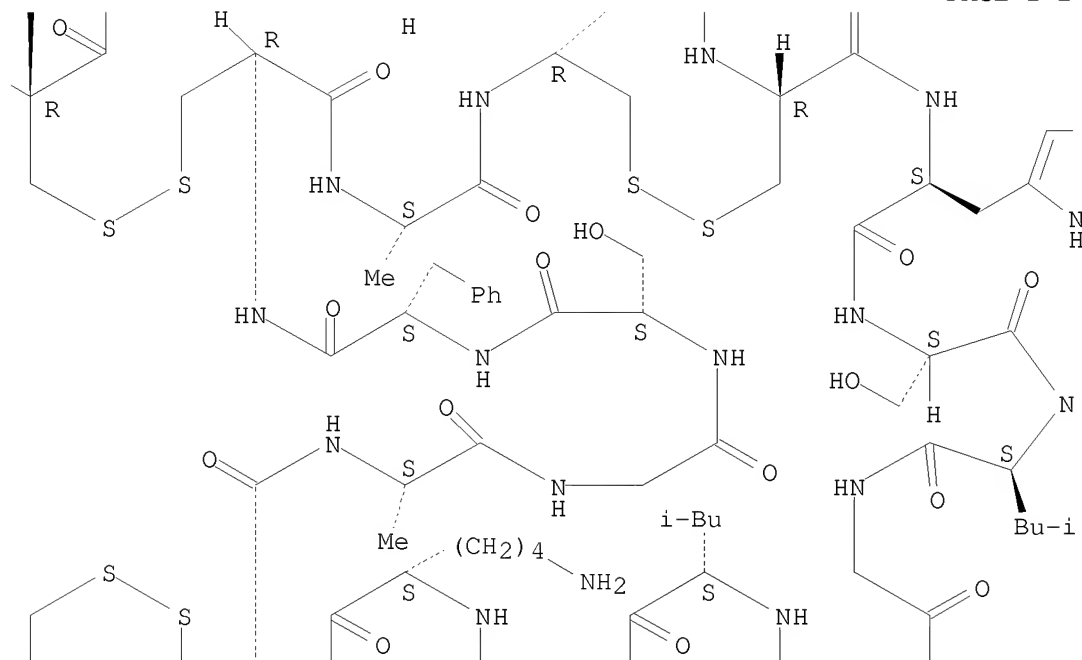
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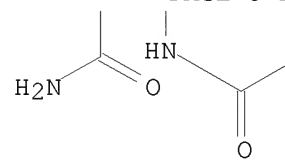


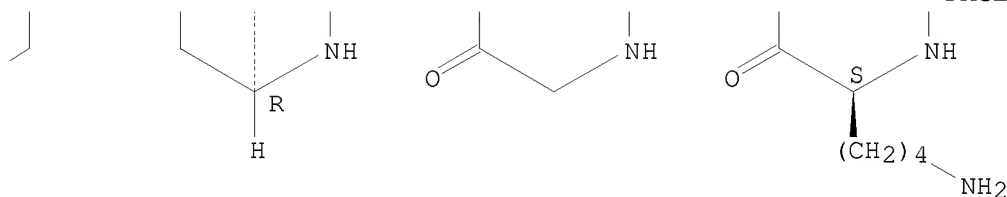
PAGE 2-C



H

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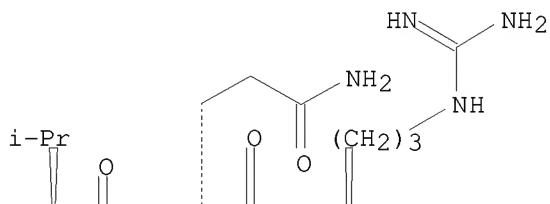


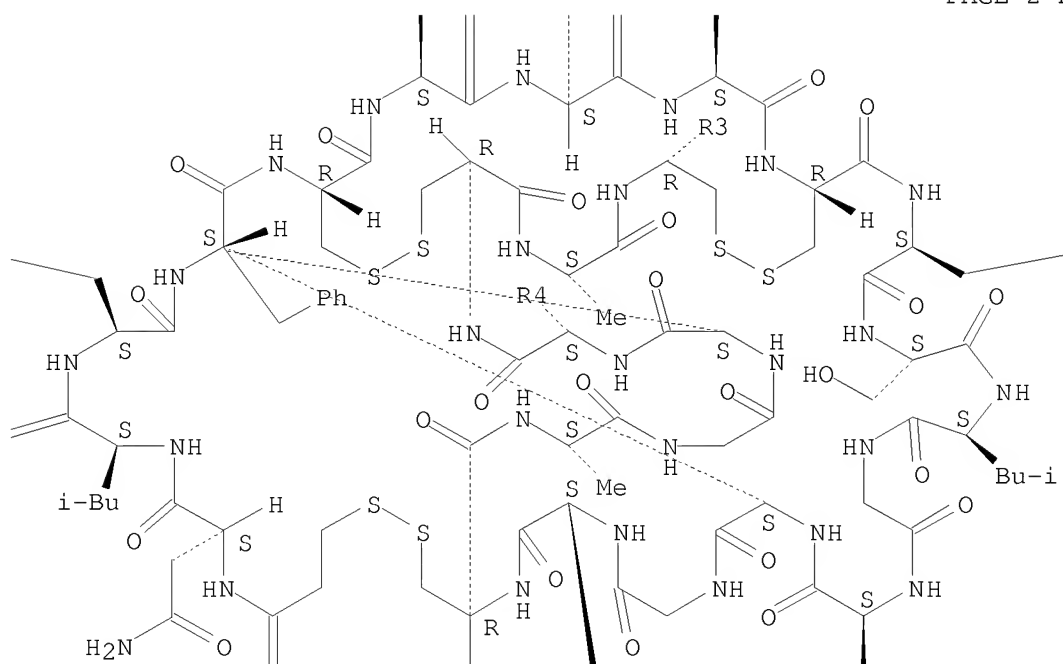
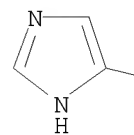


RN 444585-68-6 HCAPLUS
 CN L-Valine, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-valyl-L-glutaminyl-L-arginyl-L-cysteinyl-L-histidyl-L-seryl-L-leucylglycyl-L-leucyl-L-lysylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI)
 (CA INDEX NAME)

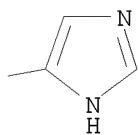
SEQ 1 XNLHFCVQRC HSLGLKGKCA GSFCACV

Absolute stereochemistry.

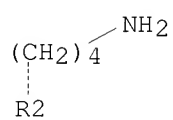
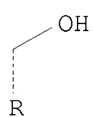




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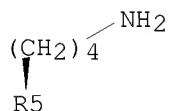
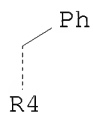
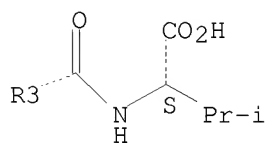


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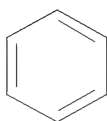




RN 444889-90-1 HCAPLUS
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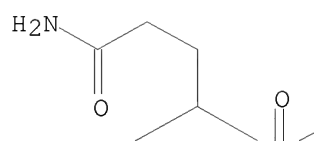
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SEQ 1 XNLQFCQLRC KSLGLLGKCA GSACACV

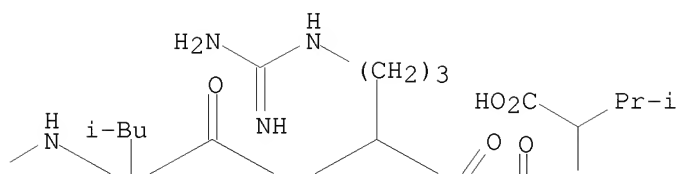


D1—Ph

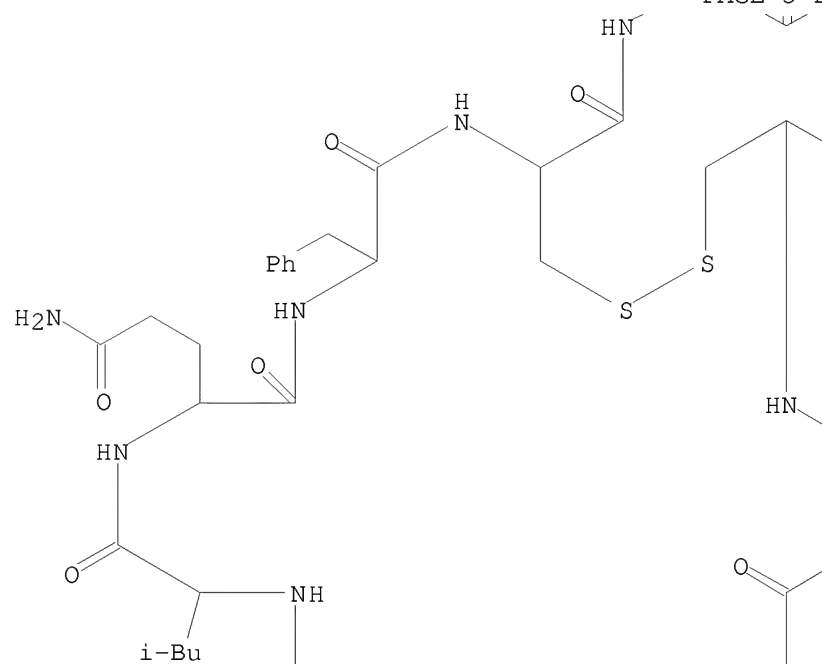
PAGE 2-B



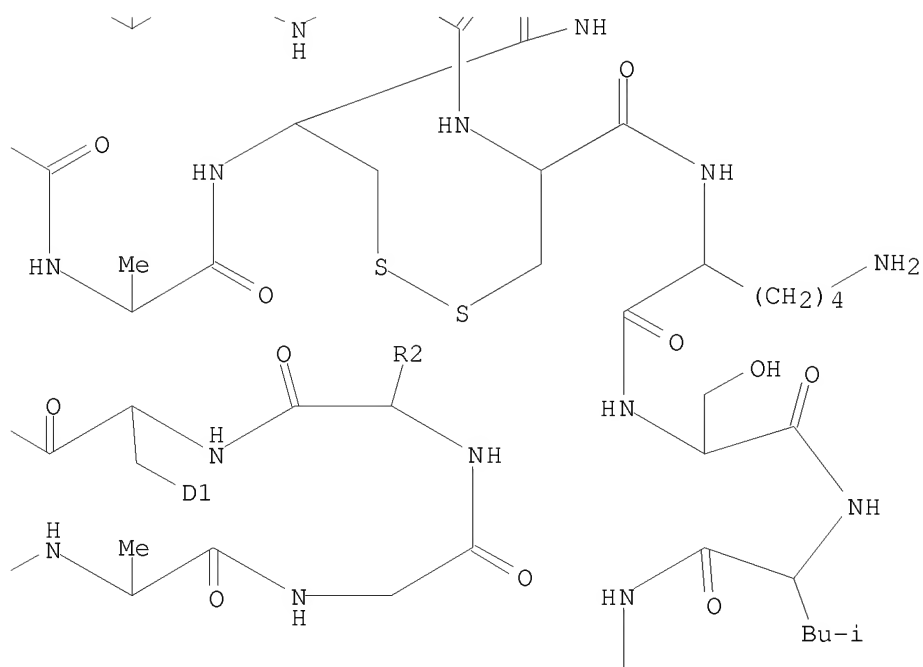
PAGE 2-C



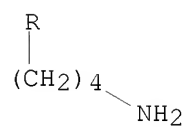
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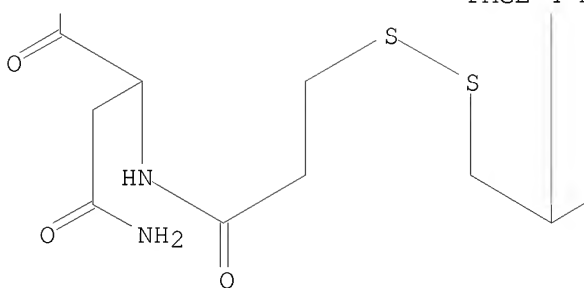
PAGE 3-C



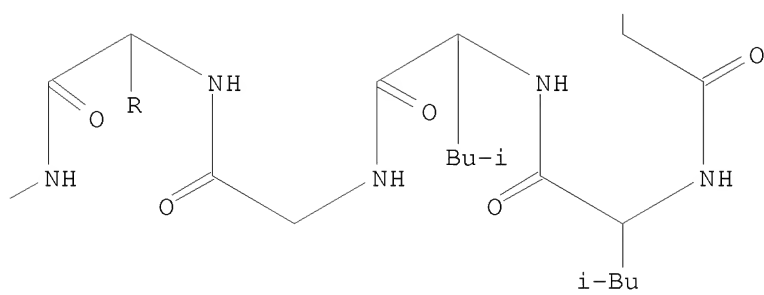
PAGE 4-A



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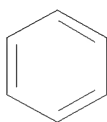


CN L-Valine, N2-(3-mercapto-1-oxopropyl)-L-asparaginyL-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-3-[1,1'-biphenyl]ylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

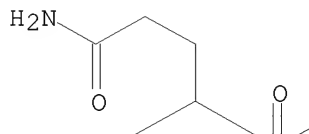
SEQ 1 XNLARCQLRC KSLGLLGKCA GSACACV

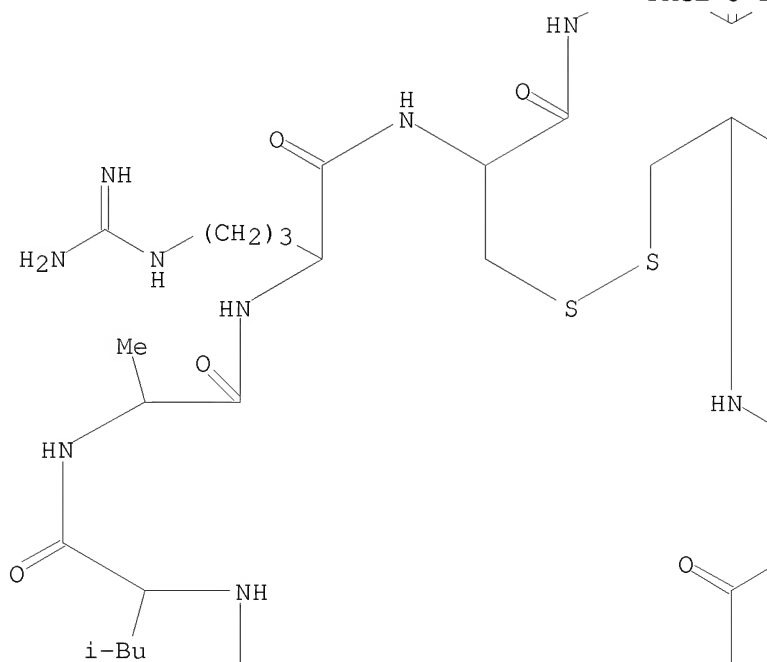
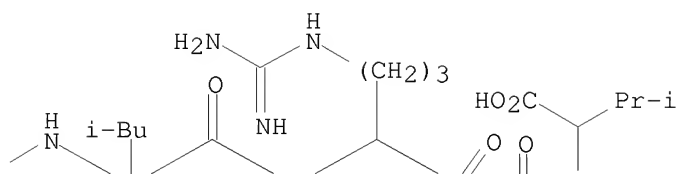
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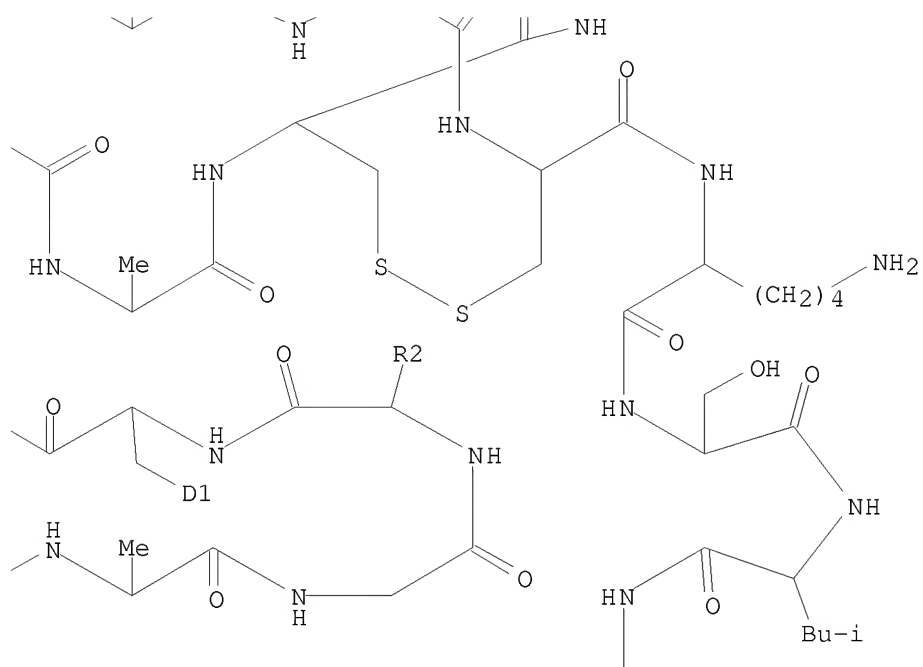
D1—Ph

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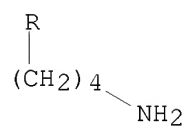


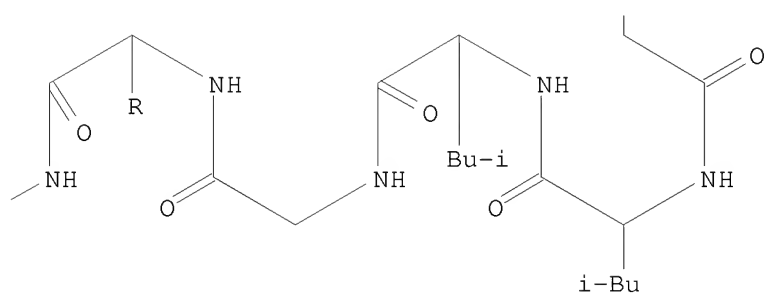
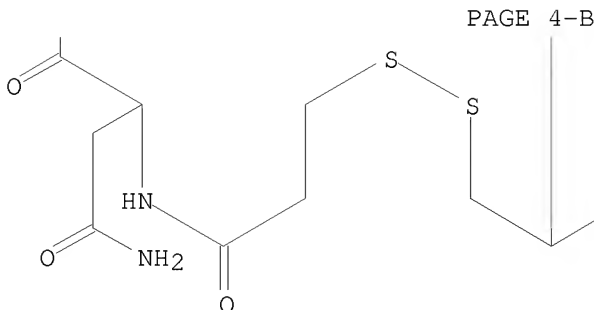


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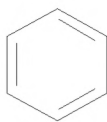


RN 444889-92-3 HCAPLUS
 CN L-Valine, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-3-[1,1'-biphenyl]ylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

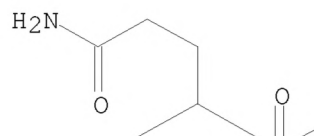
SEQ 1 XNLHFCQLRC KSLGLLGKCA GSACACV

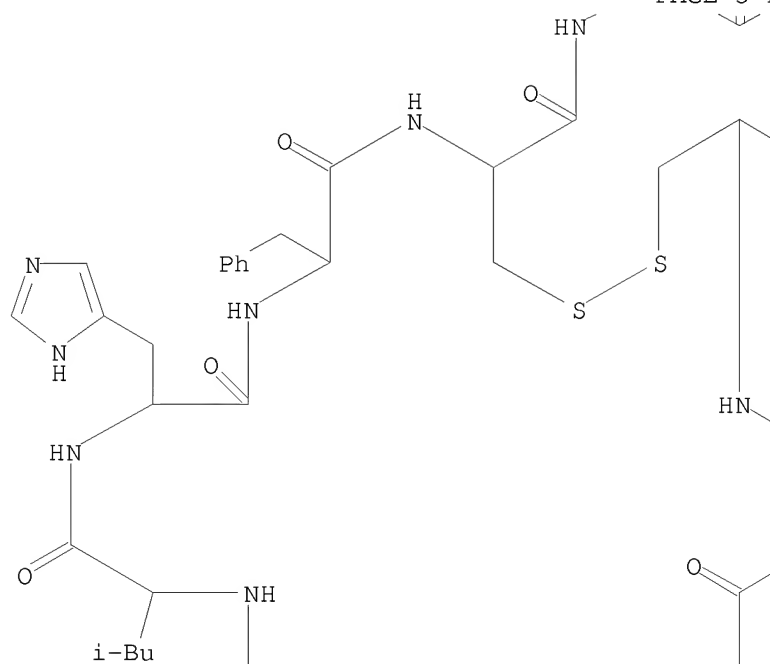
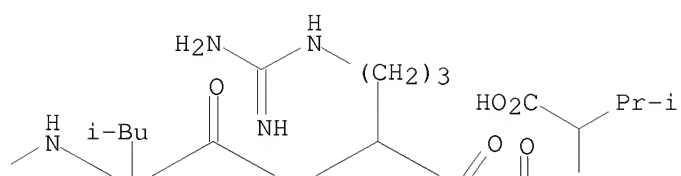
PAGE 1-A



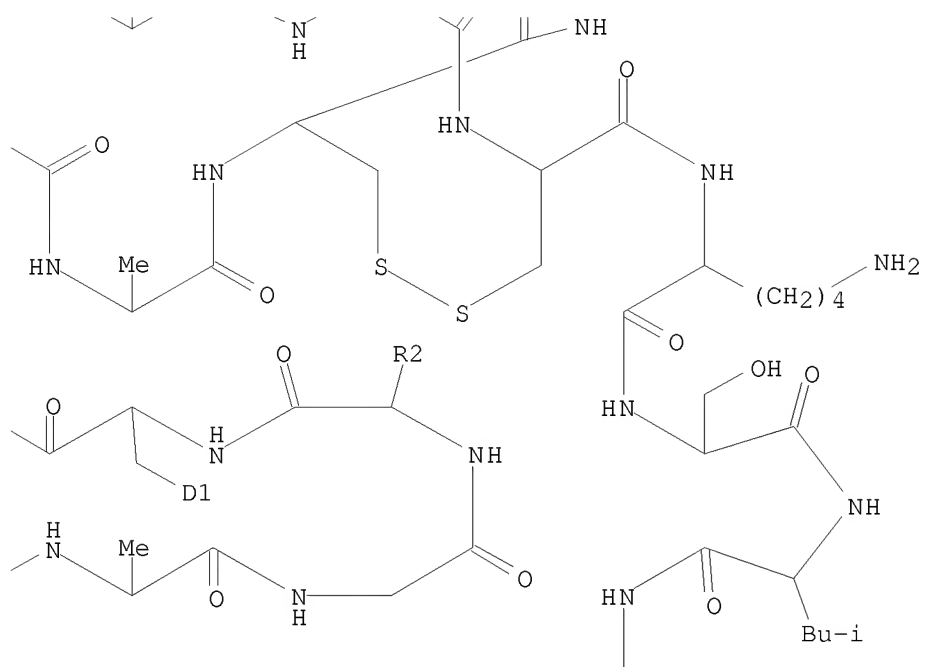
D1—Ph

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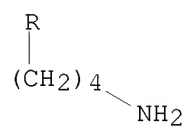


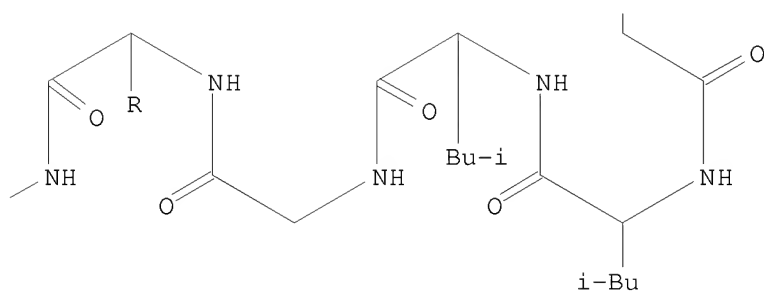
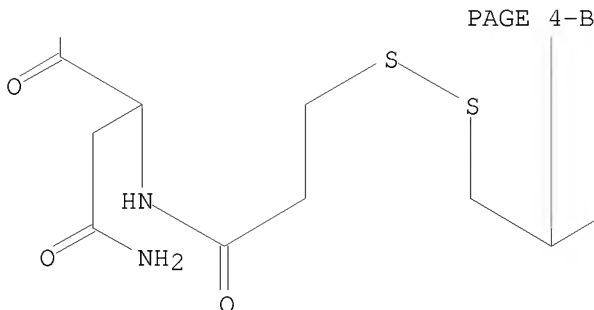


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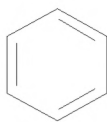


RN 444889-93-4 HCAPLUS
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NTE modified (modifications unspecified)

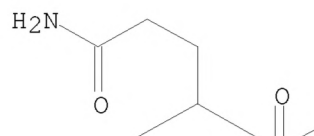
SEQ 1 XNLHFCQLRC KSLGLLGKCA DSACACV

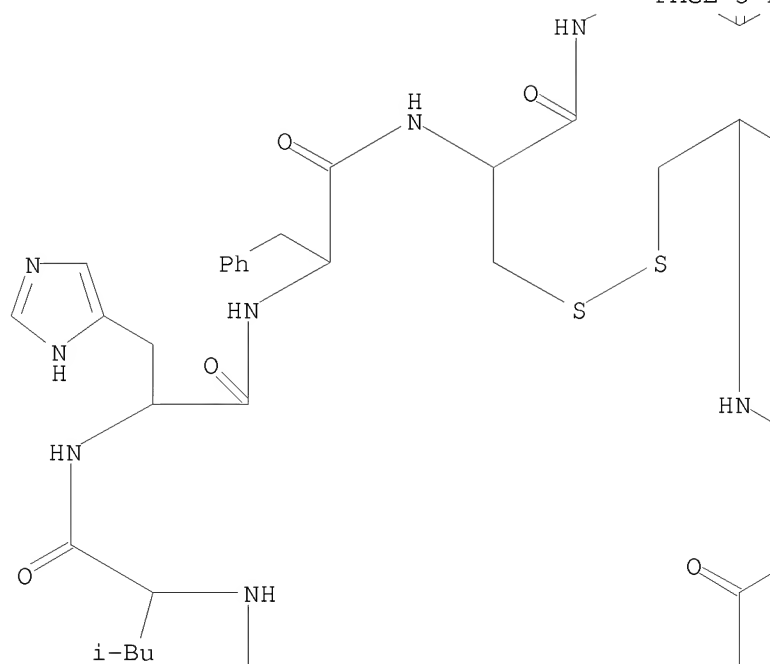
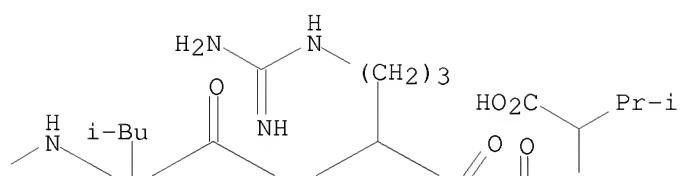
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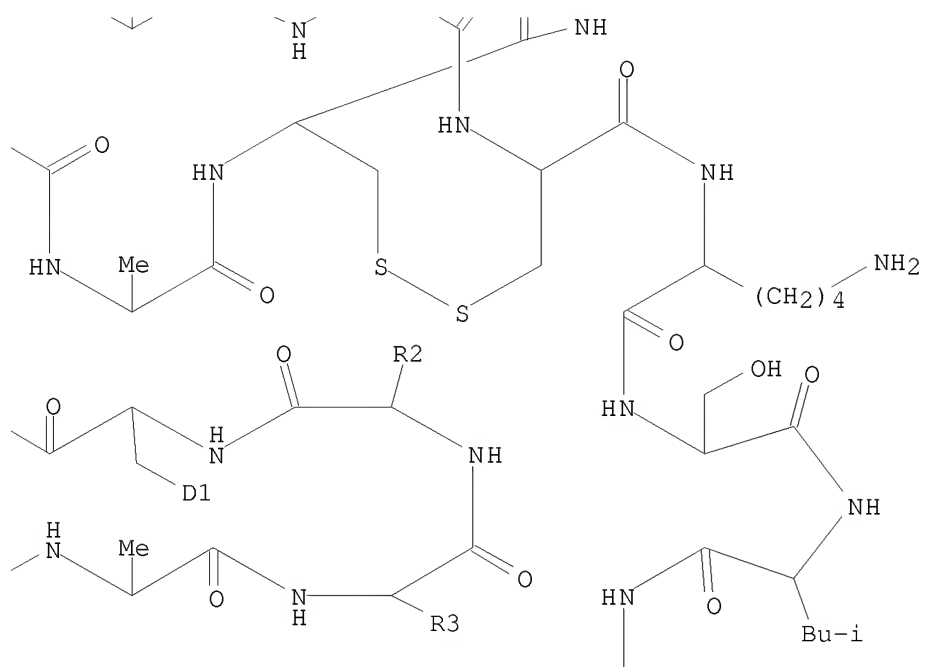
D1—Ph

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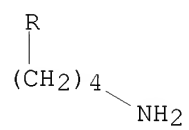


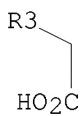
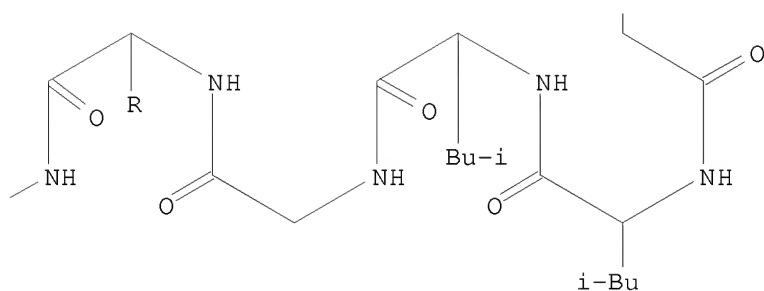
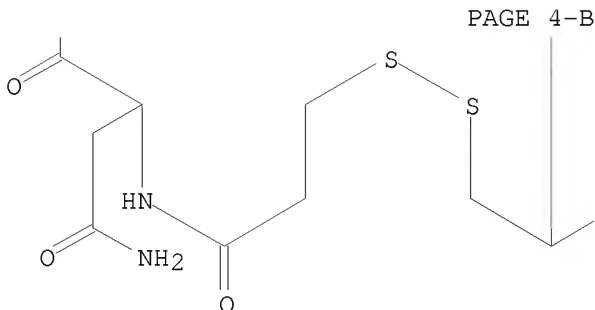


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RN 445313-53-1 HCAPLUS
 CN Peptide, (Mpa-Asn-Leu-His-Phe-Cys-Val-Gln-Arg-Cys-His-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLHFCVQRC HSLGLLGKCA GSXCACV

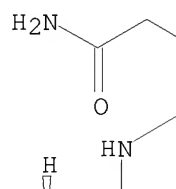
IT 444585-61-9P 444585-67-5DP, fluorescein derivs.
 444585-68-6DP, fluorescein derivs. 444585-70-0P
 444585-71-1P 444889-92-3DP, fluorescein derivs.
 444889-94-5P
 RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (peptides with affinity for gp120 viral protein, and therapeutic and

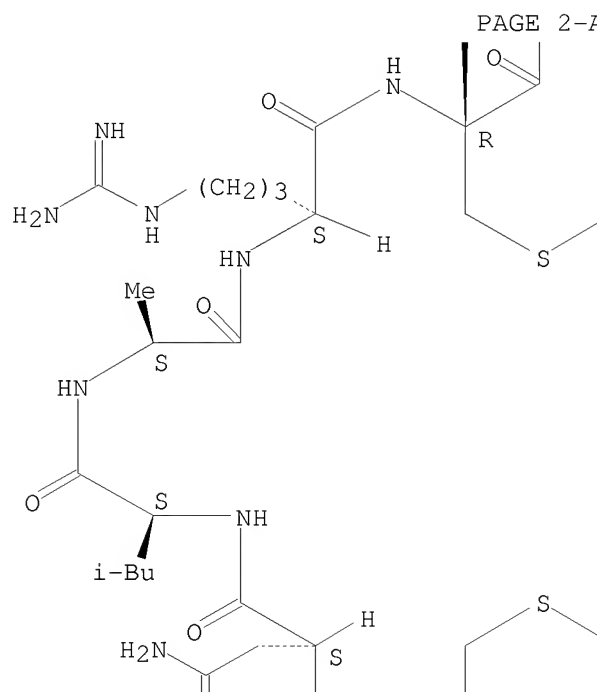
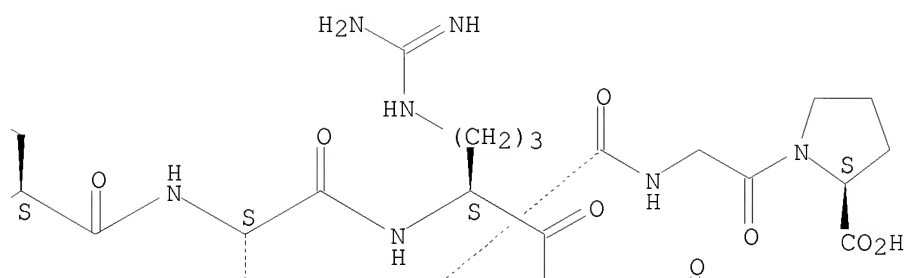
other use)
 RN 444585-61-9 HCAPLUS
 CN L-Proline, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-, cyclic (1→19), (6→24), (10→26)-tris(disulfide) (9CI) (CA INDEX NAME)

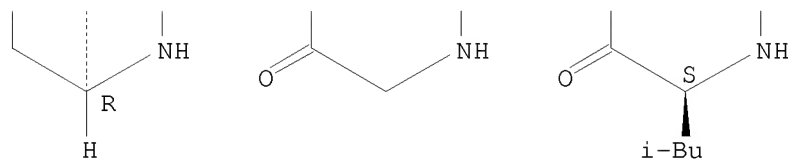
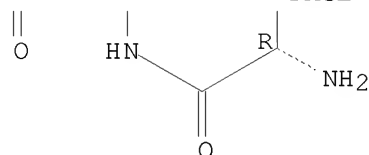
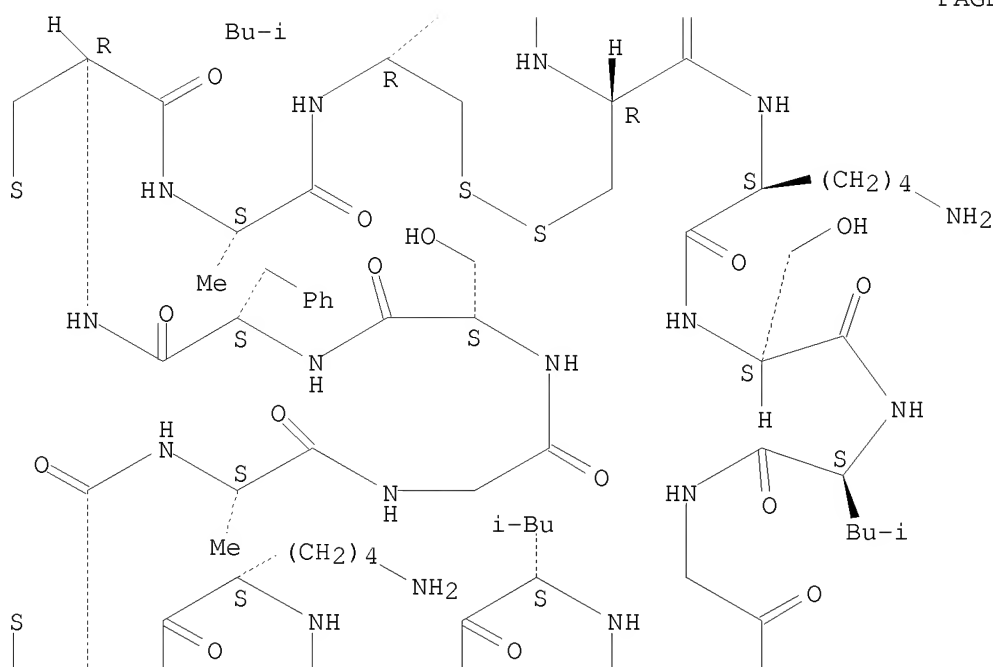
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

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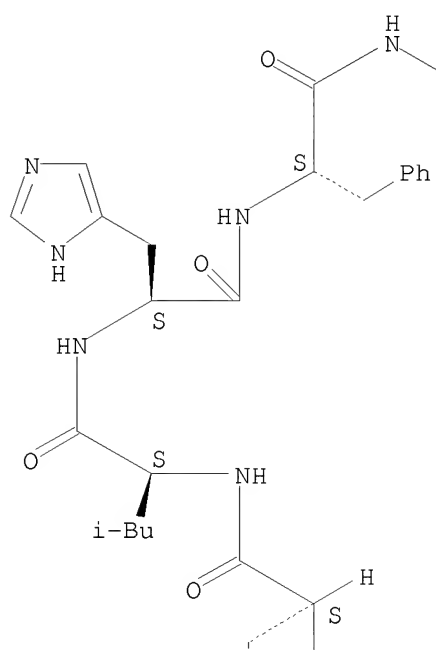
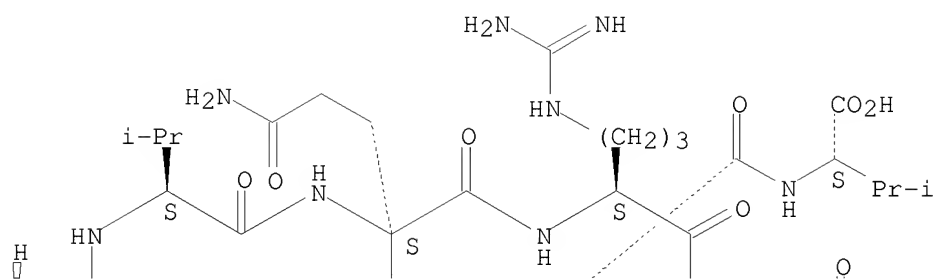


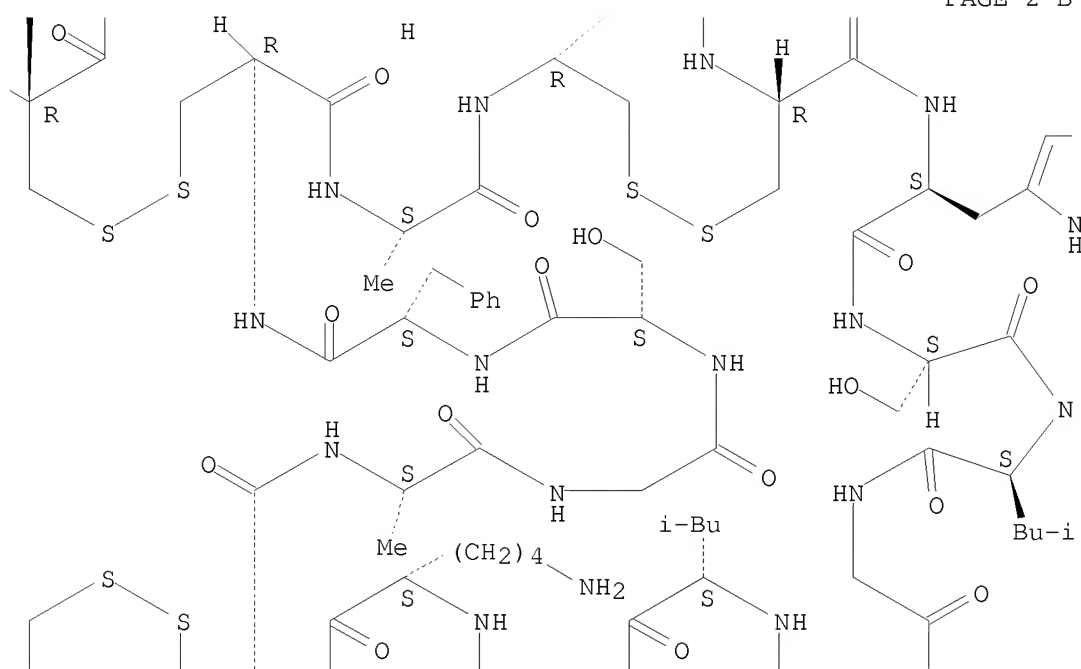
RN 444585-67-5 HCAPLUS

CN L-Valine, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-valyl-L-glutaminyl-L-arginyl-L-cysteinyl-L-histidyl-L-seryl-L-leucylglycyl-L-lysyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI)
(CA INDEX NAME)

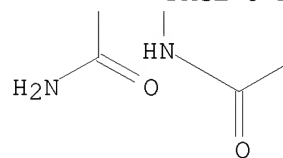
SEQ 1 XNLHFCVQRC HSLGKLGKCA GSFCACV

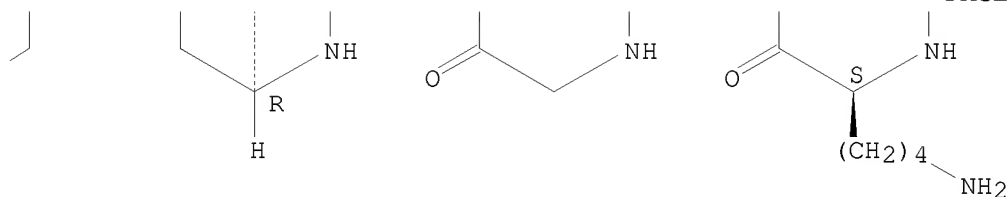
Absolute stereochemistry.





H



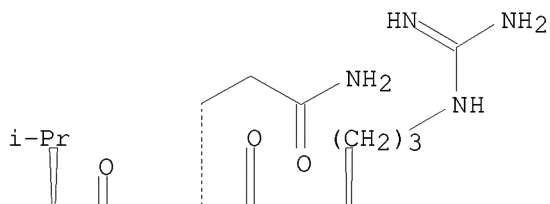


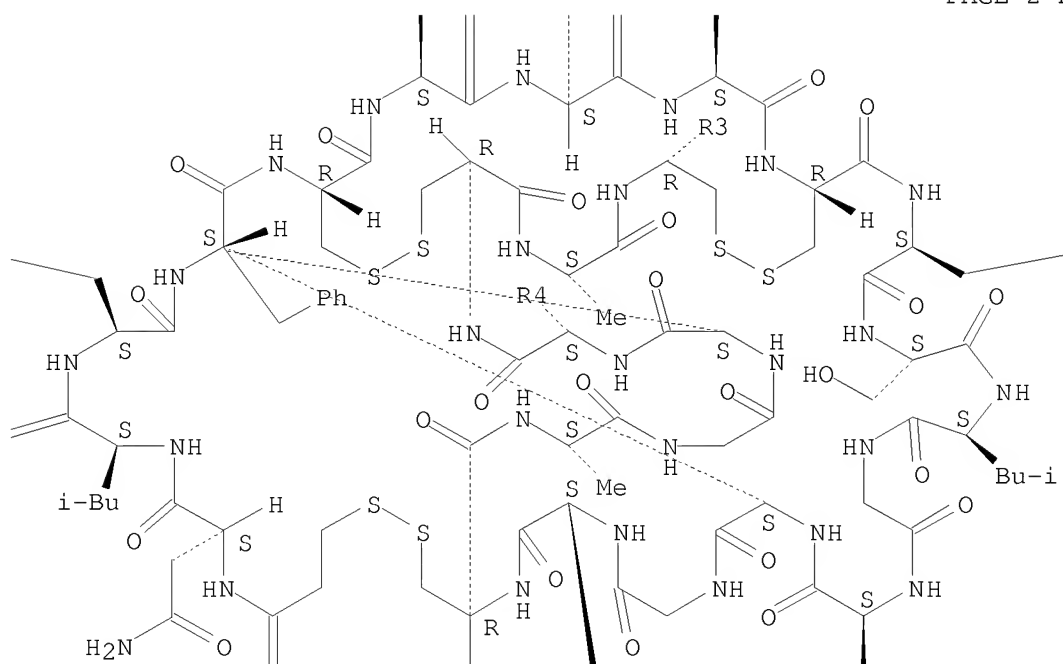
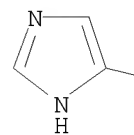
RN 444585-68-6 HCAPLUS

CN L-Valine, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-valyl-L-glutaminyl-L-arginyl-L-cysteinyl-L-histidyl-L-seryl-L-leucylglycyl-L-leucyl-L-lysylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI)
(CA INDEX NAME)

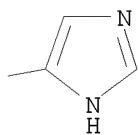
SEQ 1 XNLHFCVQRC HSLGLKGKCA GSFCACV

Absolute stereochemistry.

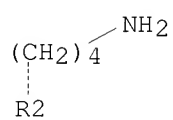
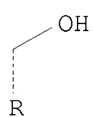




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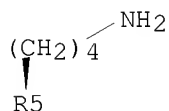
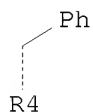
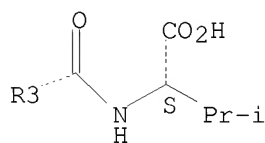


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PAGE 3-B





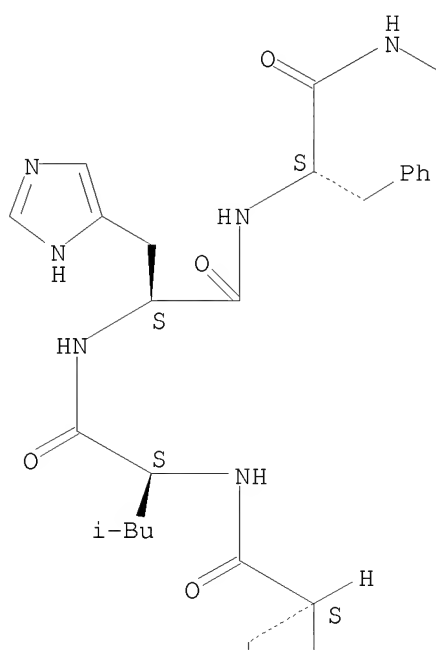
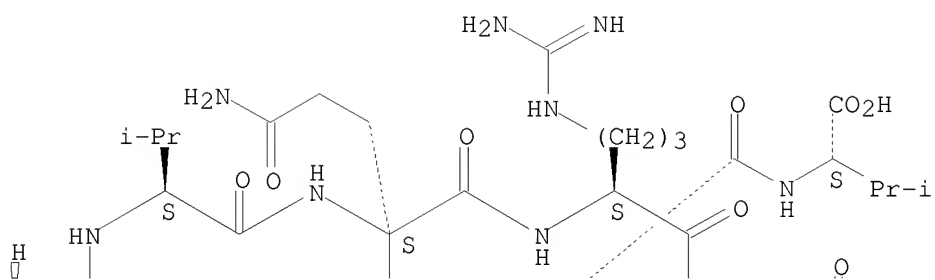
RN 444585-70-0 HCAPLUS

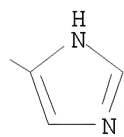
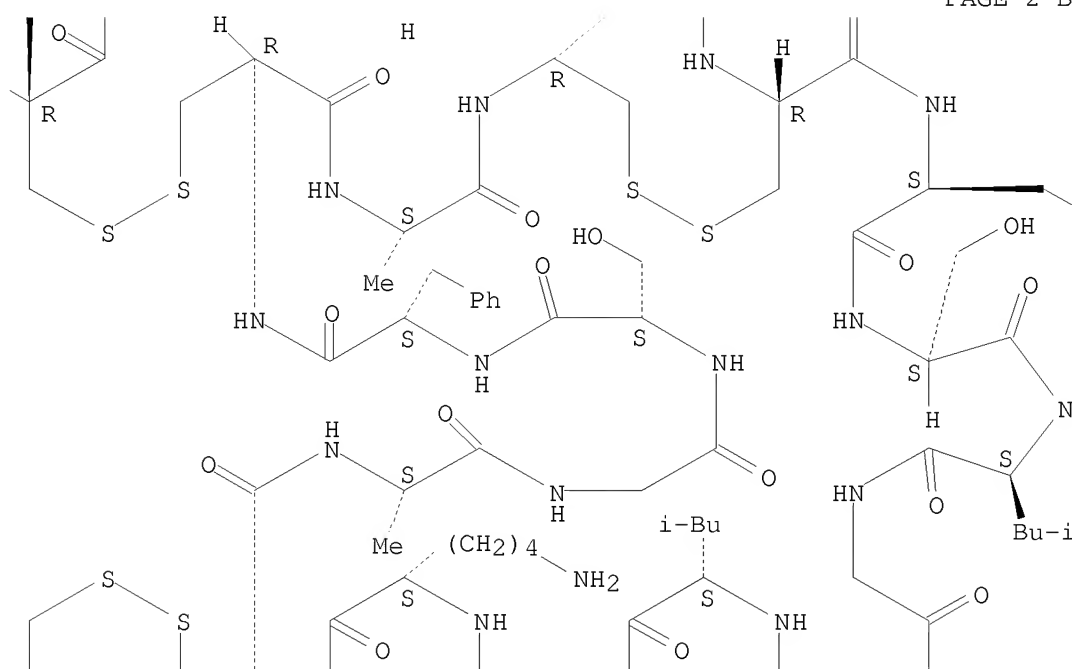
CN L-Valine, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-valyl-L-glutaminyl-L-arginyl-L-cysteinyl-L-histidyl-L-seryl-L-leucylglycyl-N6-[8-[[2-(3,6-dihydroxy-9H-xanthen-9-yl)benzoyl]amino]-1,3,6-trioxooctyl]-L-lysyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanyl-glycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

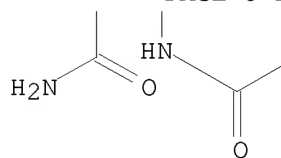
SEQ 1 XNLHFCVQRC HSLGKLGKCA GSFCACV

Absolute stereochemistry.





H

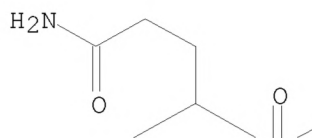


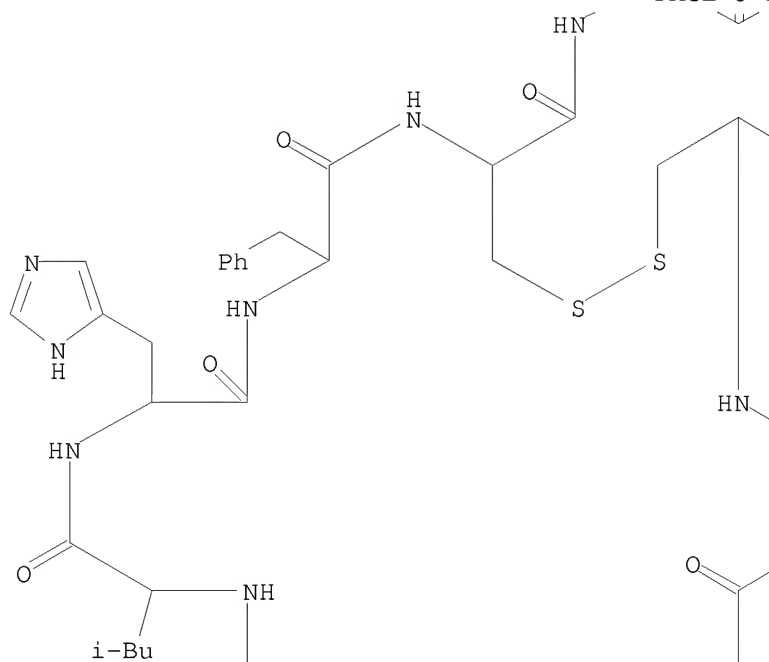
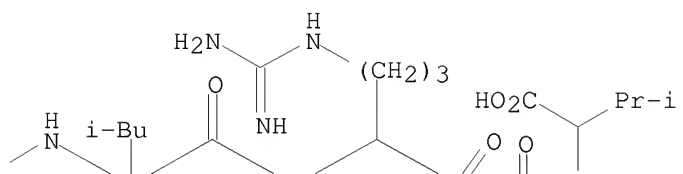
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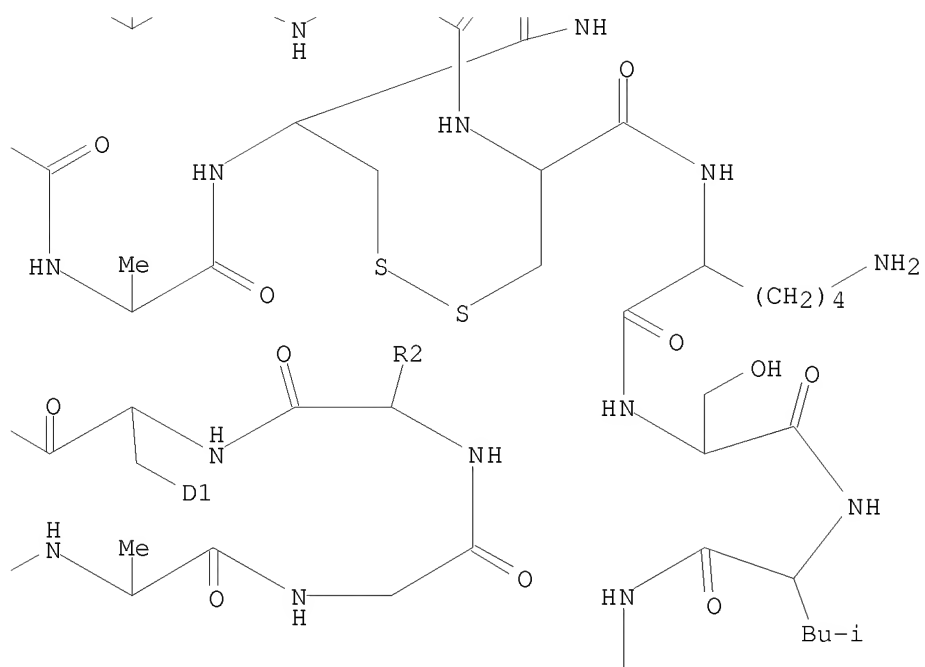
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PAGE 2-B

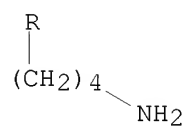


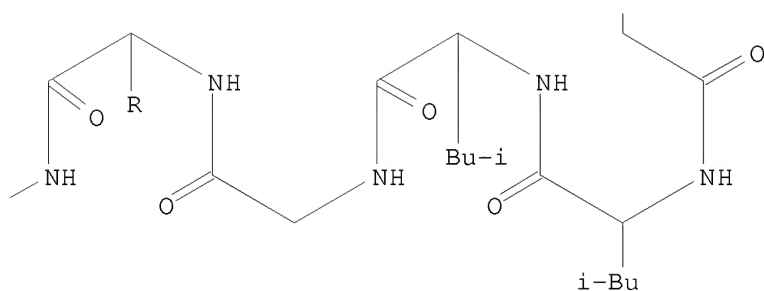
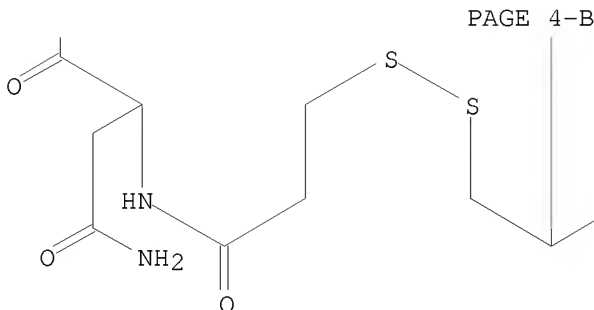


PAGE 3-C



PAGE 4-A





RN 444889-94-5 HCAPLUS
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NTE modified (modifications unspecified)

SEQ 1 XNLHFCQLRC KSLGLLGKCA GSACACV

L2 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN
 IT 441018-23-1

RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
 (β-turn Phe in HIV-1 env binding site of CD4 and CD4 mimetic miniprotein enhances env binding affinity but is not required for activation of co-receptor/17b site)

RN 441018-23-1 HCAPLUS

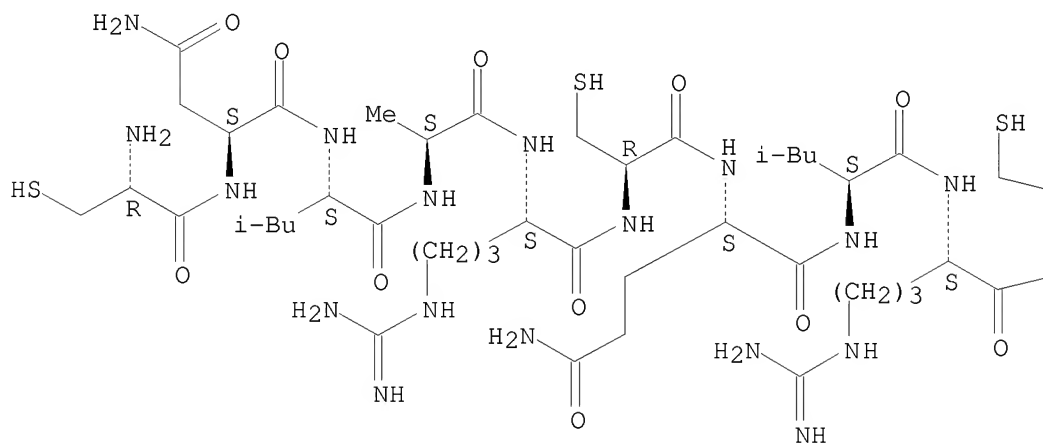
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NTE modified

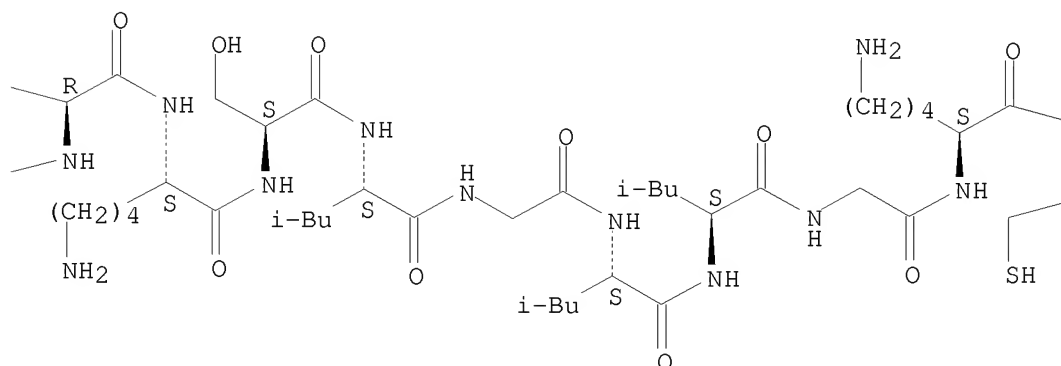
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

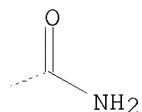
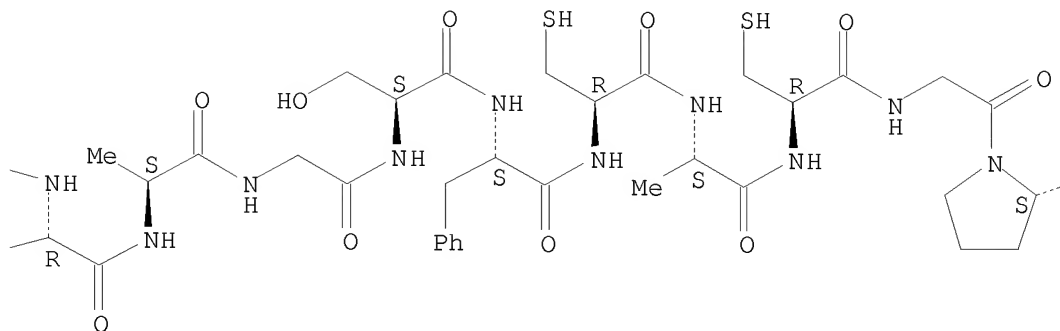
Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



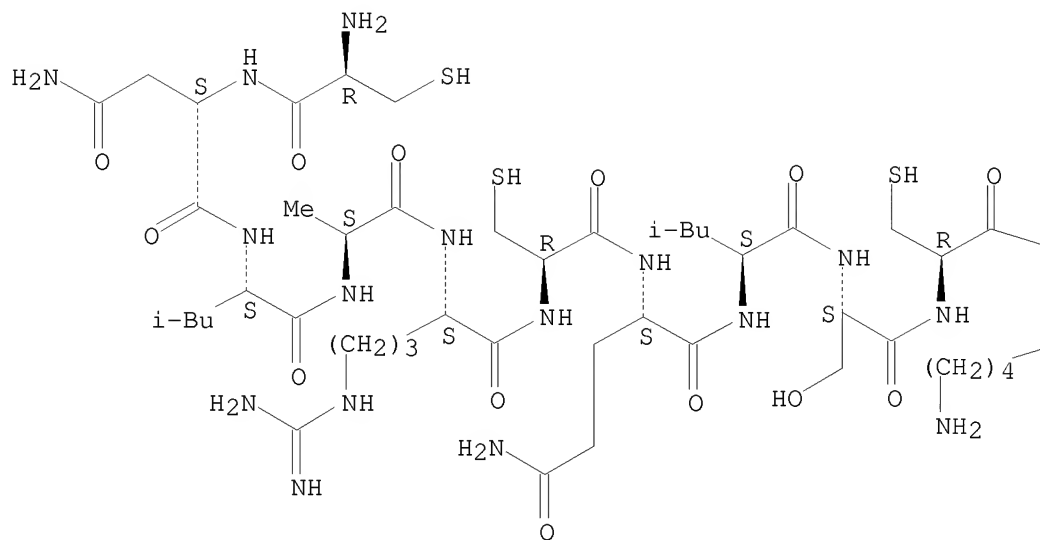


L2 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN
 IT 326494-27-3 326494-28-4
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
 (Biological study); PROC (Process)
 (engineering bioactive mini-proteins on scaffolds as tools in biochem.
 and drug design)
 RN 326494-27-3 HCAPLUS
 CN Glycine, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-
 L-glutamyl-L-leucyl-L-seryl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-
 leucyl-L-lysylglycylglycyl-L-cysteinyl-L-alanyl-L-cysteinyl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl- (9CI) (CA INDEX NAME)

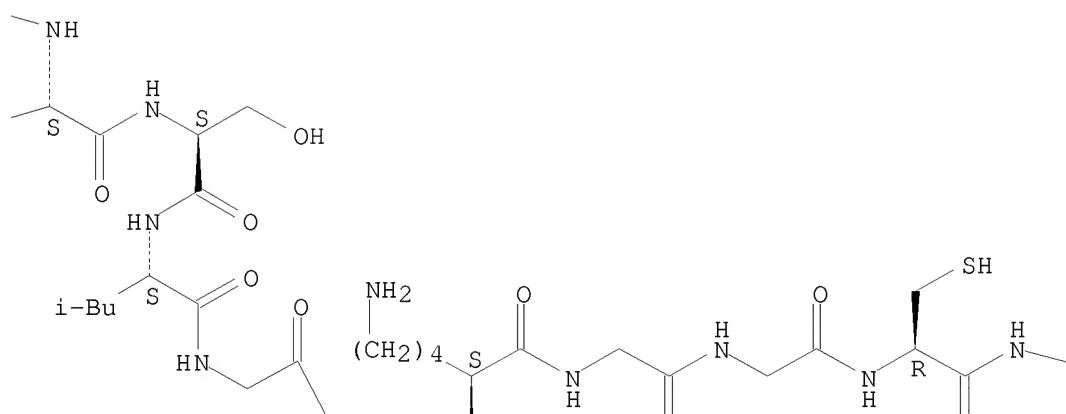
SEQ 1 CNLARCQLSC KSLGLKGGCA GSFCACG

Absolute stereochemistry.

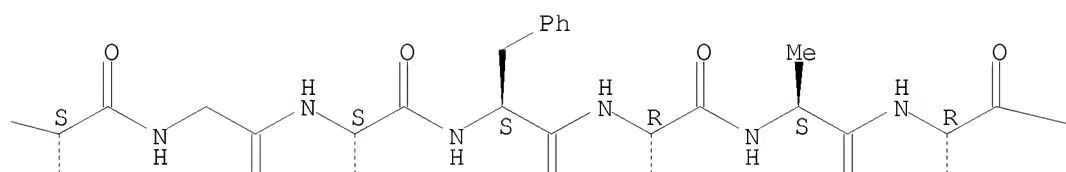
PAGE 1-A



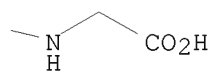
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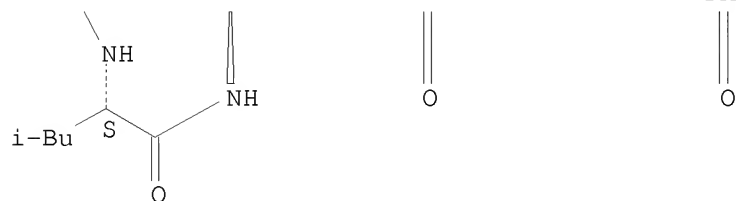
PAGE 1-C



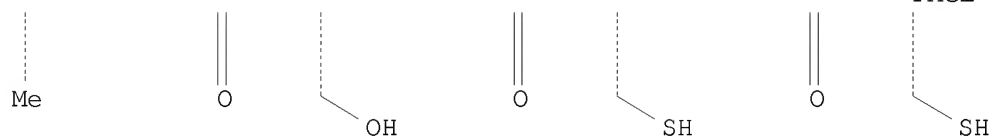
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PAGE 2-B



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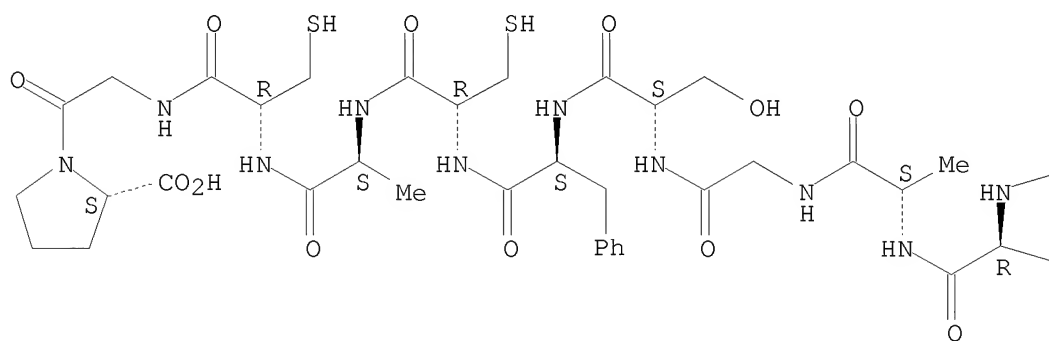


RN 326494-28-4 HCAPLUS
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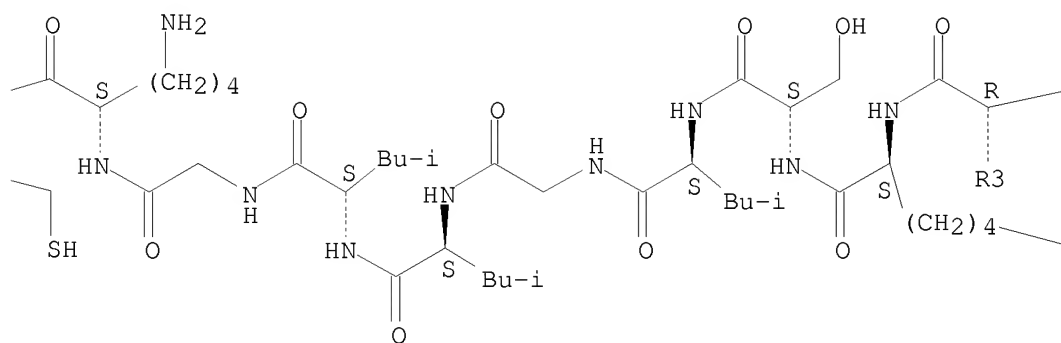
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

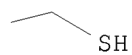
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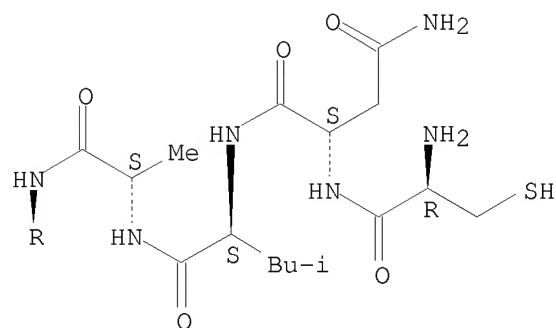
PAGE 1-B



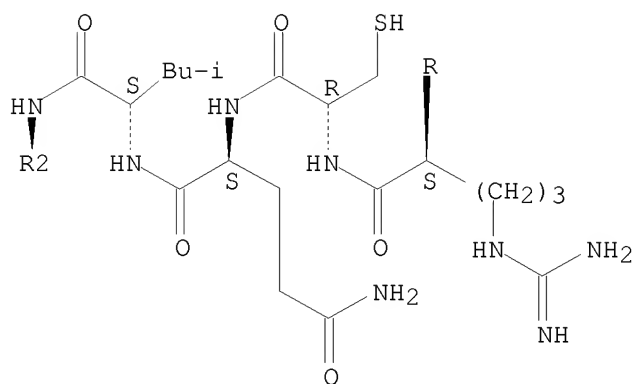
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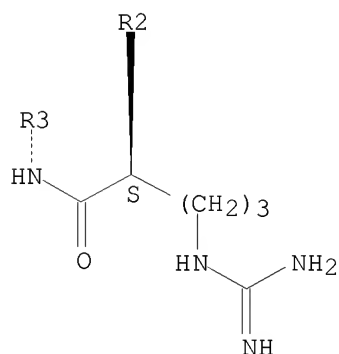
PAGE 2-A



PAGE 3-A



PAGE 4-A



=> d his

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FILE 'REGISTRY' ENTERED AT 14:56:16 ON 28 SEP 2008

L1 82 C[AG][GDS][SHN].C[TA]C[GVI]/SQSP

FILE 'HCAPLUS' ENTERED AT 14:57:48 ON 28 SEP 2008

L2 24 L1

=> logoff h

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
178.64	223.02

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-0.75

CA SUBSCRIBER PRICE

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 15:00:08 ON 28 SEP 2008

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1654MCG

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
SESSION RESUMED IN FILE 'HCAPLUS' AT 15:13:54 ON 28 SEP 2008
FILE 'HCAPLUS' ENTERED AT 15:13:54 ON 28 SEP 2008
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	178.64	223.02
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-0.75

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	178.64	223.02
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-0.75

FILE 'HCAPLUS' ENTERED AT 15:14:05 ON 28 SEP 2008
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FILE COVERS 1907 - 28 Sep 2008 VOL 149 ISS 14
FILE LAST UPDATED: 26 Sep 2008 (20080926/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

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(FILE 'HOME' ENTERED AT 14:54:11 ON 28 SEP 2008)

FILE 'REGISTRY' ENTERED AT 14:56:16 ON 28 SEP 2008

L1 82 C[AG][GDS][SHN].C[TA]C[GVI]/SQSP

FILE 'HCAPLUS' ENTERED AT 14:57:48 ON 28 SEP 2008
L2 24 L1

FILE 'HCAPLUS' ENTERED AT 15:14:05 ON 28 SEP 2008

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-0.75

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STRUCTURE FILE UPDATES: 26 SEP 2008 HIGHEST RN 1053621-88-7
DICTIONARY FILE UPDATES: 26 SEP 2008 HIGHEST RN 1053621-88-7

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TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

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(FILE 'HOME' ENTERED AT 14:54:11 ON 28 SEP 2008)

FILE 'REGISTRY' ENTERED AT 14:56:16 ON 28 SEP 2008
L1 82 C[AG][GDS][SHN].C[TA]C[GVI]/SQSP

FILE 'HCAPLUS' ENTERED AT 14:57:48 ON 28 SEP 2008
L2 24 L1

FILE 'HCAPLUS' ENTERED AT 15:14:05 ON 28 SEP 2008

FILE 'REGISTRY' ENTERED AT 15:14:18 ON 28 SEP 2008

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION

CA SUBSCRIBER PRICE 0.00 -0.75

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=> file registry

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
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CA SUBSCRIBER PRICE	0.00	-0.75

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DICTIONARY FILE UPDATES: 26 SEP 2008 HIGHEST RN 1053621-88-7

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TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

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<http://www.cas.org/support/stngen/stndoc/properties.html>

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-0.75

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FILE LAST UPDATED: 26 Sep 2008 (20080926/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> l2
L4 24 L1

=> d ibib abs total hitseq

L4 ANSWER 1 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2008:965148 HCAPLUS
DOCUMENT NUMBER: 149:304667
TITLE: Preparation of anti-AIDS peptides and their fusion product for prevention HIV infection
INVENTOR(S): Wang, Shilong; Shi, Jun; Sun, Xiaoyu; Wang, Mei; He, Jiaojuan; Lin, Nan; Wang, Yuan
PATENT ASSIGNEE(S): Tongji University, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 23pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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CN 101235083	A	20080806	CN 2007-10037104	20070202
PRIORITY APPLN. INFO.:			CN 2007-10037104	20070202

AB The invention discloses the peptides and peptide composition against HIV-I, the coding sequences of the peptides and their fusion product, the expression vectors, the manufacturing method and the application thereof. The peptides and peptide composition are expressed after gene recombination or synthesized with peptide synthesizer. The peptides was able to inhibition of infection of HIV virus into MT-2 cells. The peptide can be used as vaccine for treatment of AIDS.

IT 1050243-28-1P 1050461-45-4P 1050461-46-5P
1050461-47-6P
RL: BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amino acid sequence; preparation of anti-AIDS peptides and their fusion product for prevention HIV infection)

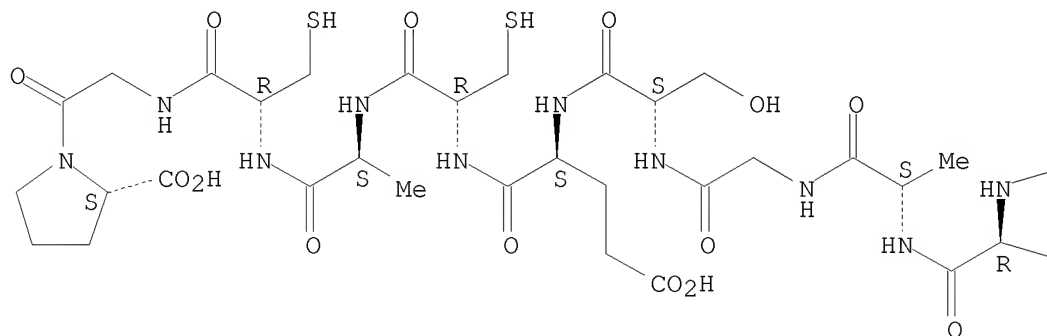
RN 1050243-28-1 HCAPLUS

CN L-Proline, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-seryl-L-cysteinyl-L-asparaginyl-L-leucyl-L-arginyl-L-cysteinyl-L- α -aspartyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucyl-L-valyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L- α -glutamyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl- (CA INDEX NAME)

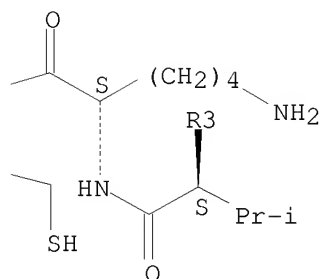
SEQ 1 CNLASCNLRC DSLGLLVKCA GSECACGP

Absolute stereochemistry.

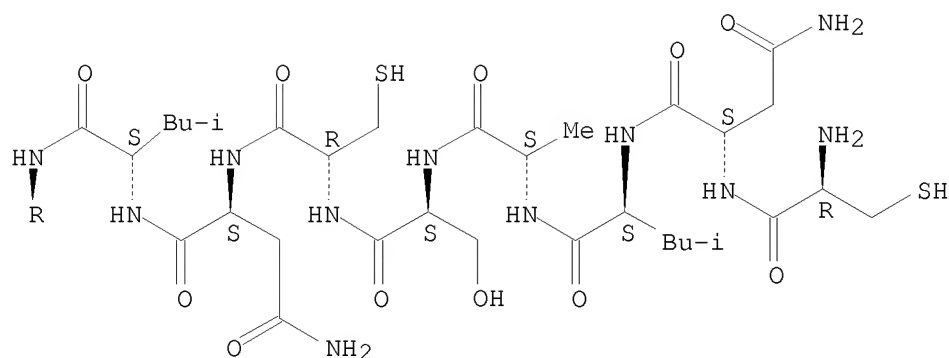
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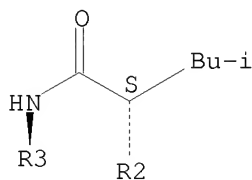
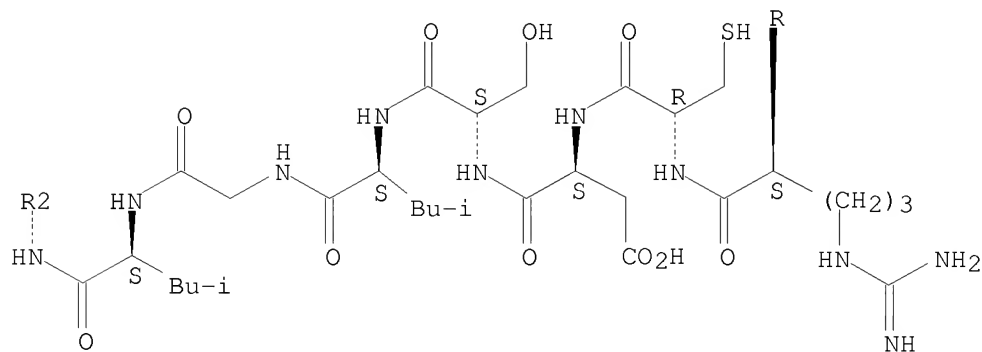
PAGE 1-B



PAGE 2-A



PAGE 3-A



RN 1050461-45-4 HCAPLUS

CN L-Proline, L- α -glutamyl-L-leucyl-L- α -aspartyl-L-lysyl-L-tryptophyl-L-alanyl-L-seryl-L-leucyl-L-tryptophyl-L-asparaginyl-L-tryptophyl-L-phenylalanyl-L-asparaginyl-L-isoleucyl-L-threonyl-L-asparaginyl-L-tryptophyl-L-leucyl-L-tryptophyl-L-tyrosyl-L-isoleucyl-L-lysyl-L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-seryl-L-cysteinyl-L-asparaginyl-L-leucyl-L-arginyl-L-cysteinyl-L- α -aspartyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucyl-L-valyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L- α -glutamyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl- (CA INDEX NAME)

SEQ 1 ELDKWASLWN WFNITNWLWY IKCNLASCNL RCDSLGLLVK CAGSECACGP

RN 1050461-46-5 HCAPLUS
CN L-Proline, L- α -glutamyl-L-prolyl-L-seryl-L- α -aspartyl-L-alanyl-L-arginyl-L-seryl-L- α -glutamyl-L-cysteinyl-L-lysyl-L-arginyl-L-seryl-L-isoleucyl-L-alanyl-L-prolyl-L-asparaginyl-L-cysteinyl-L-histidyl-L-alanyl-L-alanyl-L-asparaginyl-L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-seryl-L-cysteinyl-L-asparaginyl-L-leucyl-L-arginyl-L-cysteinyl-L- α -aspartyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucyl-L-valyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L- α -glutamyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl- (CA INDEX NAME)

SEQ 1 EPSDARSECK RSIAPNCHAA NCNLASCNLR CDSLGLLVKC AGSECACGP

RN 1050461-47-6 HCAPLUS
CN INDEX NAME NOT YET ASSIGNED

SEQ 1 ELDKWASLWN WFNITNWLWY IKCNLASCNL RCDSLGLLVK CAGSECACGP
51 EPSDARSECK RSIAPNCHAA N

L4 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:367006 HCAPLUS

DOCUMENT NUMBER: 148:575929

TITLE: CD4 mimetic miniproteins: potent anti-HIV compounds with promising activity as microbicides

AUTHOR(S): Van Herrewwege, Yven; Morellato, Laurence; Descours, Anne; Aerts, Laetitia; Michiels, Jo; Heyndrickx, Leo; Martin, Loic; Vanham, Guido

CORPORATE SOURCE: Virology Unit, Department of Microbiology, Institute of Tropical Medicine, Antwerp, Belg.

SOURCE: Journal of Antimicrobial Chemotherapy (2008), 61(4), 818-826

CODEN: JACHDX; ISSN: 0305-7453

PUBLISHER: Oxford University Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Objectives: The antiviral activity of CD4 miniproteins was evaluated as potential HIV microbicides, using relevant in vitro models. Methods: Compds. were tested in a single-cycle HIV-1 pseudovirus assay and against replication competent HIV-1 in cocultures of monocyte-derived dendritic cells (MO-DC) and CD4+ T cells. Cytotoxic activity was evaluated in an MTT assay. Results: Monomeric miniproteins (M47 and M48) showed 50% effective concentration (EC50) values of 79-105 nM against a subtype B, CCR5 coreceptor-using Ba-L pseudovirus. Higher activity was found for the dimeric miniproteins M48D30, M48D50 and M48D100 (EC50 between 15 and 30 nM), in contrast to the tetrameric miniproteins M48T30, M48T50 and M48T100 (EC50 between 107 and 377 nM). The hetero-bivalent miniprotein M48-Hep and miniproteins that targeted the Phe-43 cavity on gp120 (M48-U1, M48-U2 and M48-U3) were highly active, with EC50 values as low as 2 nM for M48-U1. All miniproteins showed high activity against CCR5 or CXCR4 coreceptor-using subtype B and CRF-011A/E pseudoviruses. Many early M48-based compds. were much less active against subtype C pseudoviruses, whereas M48-U compds. that targeted the Phe-43 cavity were very active against all pseudoviruses, including subtype C. In MO-DC/CD4+ T cell cocultures with replication-competent HIV-1 Ba-L, EC50 values ranged between 13 and 1719 nM depending on the miniprotein, with M48-U1, M48-U2 and M48-U3 again being the most potent. Importantly, the latter compds.

completely prevented viral replication by treating the cultures from 2 h before until 24 h after infection, at nontoxic concns. of 66-6564 nM. Conclusions: These novel CD4 miniproteins might constitute a promising class of HIV microbicides.

IT 918796-22-2

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(potent anti-HIV compds. with promising activity as microbicides of CD4 mimetic miniproteins)

RN 918796-22-2 HCAPLUS

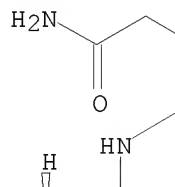
CN L-Valinamide, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-3-[1,1'-biphenyl]-4-yl-L-alanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9.fwd arw.25)-tris(disulfide) (CA INDEX NAME)

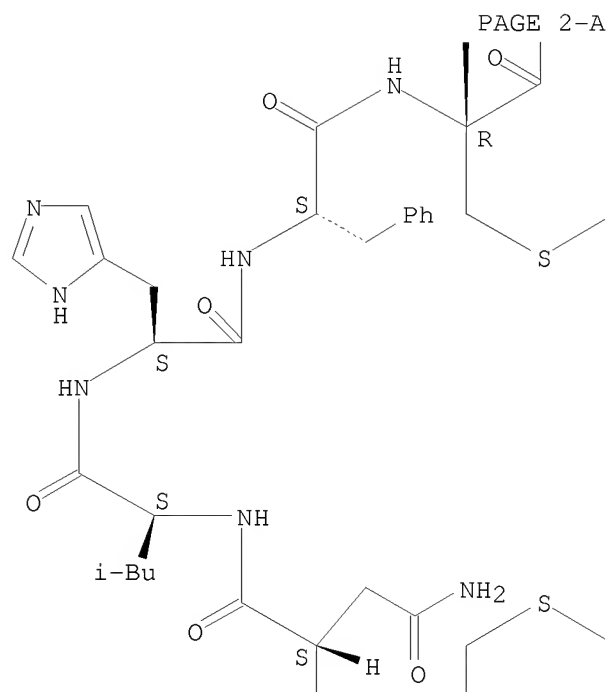
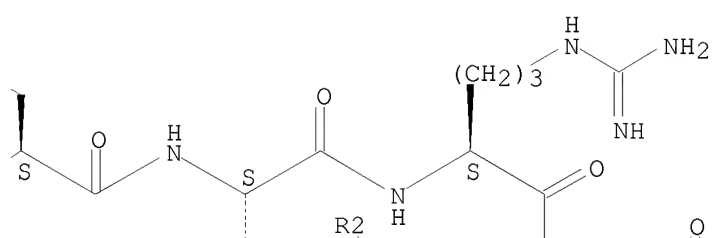
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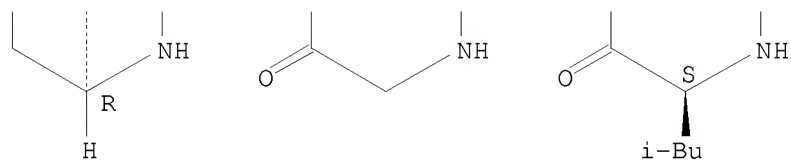
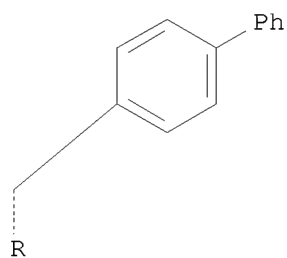
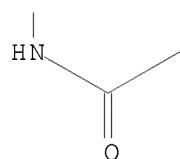
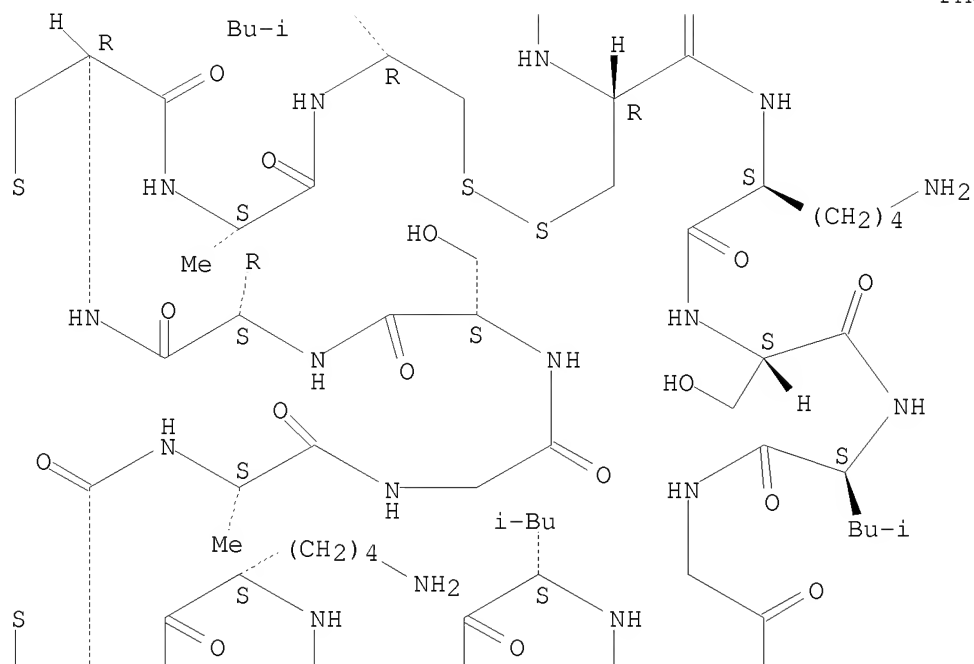
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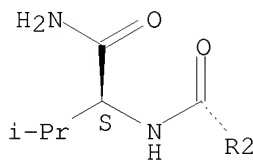
Absolute stereochemistry.

PAGE 1-A









REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:157063 HCAPLUS

DOCUMENT NUMBER: 148:239502

TITLE: Preparation of activated CD4-receptor-derived peptides containing a single lysine residue which are capable of coupling by covalent bonding with organic molecules containing a sulfanyl group or a modified polyanion containing a sulfanyl group, and their conjugates useful for treating AIDS

INVENTOR(S): Baleux, Françoise

PATENT ASSIGNEE(S): Institut Pasteur, Fr.; Centre National De La Recherche Scientifique

SOURCE: PCT Int. Appl., 59pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008015273	A1	20080207	WO 2007-EP58069	20070803
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
FR 2904627	A1	20080208	FR 2006-7149	20060804
PRIORITY APPLN. INFO.:			FR 2006-7149	A 20060804

OTHER SOURCE(S): MARPAT 148:239502

AB The invention relates to a method of preparation of an activated peptide derived from the CD4 receptor which is capable of coupling by covalent bonding with an organic mol., said peptide of formula Xaaf-P1-Lys-Cys-P2-Cys-P3-Cys-Xaag-Xaah-Xaai-Xaaj-Cys-Xaak-Cys-Xaal-Xaam [I; P1 = 3-6 amino acid residues; P2 = 2-4 amino acid residues; P3 = 6-10 amino acid residues; Xaaf = Ac-Cys or thiopropionic acid (TPA); Xaag = Ala, Gln; Xaah = Gly, D-Asp, Ser; Xaai = Ser, His, Asn; Xaaj = biphenylalanine (Bip), phenylalanine, β -naphthylalanine; Xaak = Thr, Ala; Xaal = Gly, Val, Leu; Xaam = NH₂, OH; the amino acid residues of P1, P2 and P3 are independently natural or nonnatural; all residues of P1, P2 and P3 are different from Lys; P1, P2 and P3 have or not one common sequence] characterized by the fact that the method includes a step of covalent bond formation between an active group of a bifunctional compound containing 2 active

groups and the free NH₂ of the Lys present in sequence I. The present invention also relates to the preparation of a conjugated mol. comprising the CD4-receptor-derived peptide I and an organic mol., preferably the GPR1 peptide or a modified polyanion bearing the SH group selected from the group consisting of heparin and heparan sulfate and to a d.p. of 10 to 24, and to its use in antiviral treatments, in particular the treatment of AIDS. Thus, coupling of MEDLEETLFEFEFENYSYDLDYYSLESCys(SH)-NH₂ (GPR1; prepared by solid phase synthesis) with the CD4 peptide TPA-Asn-Leu-His-Lys-Cys-Gln-Leu-Arg-Cys-Ser-Ser-Leu-Gly-Leu-Leu-Gly-Arg-Cys-Ala-Gly-Ser-Bip-Cys-Ala-Cys-Val-NH₂ (II; prepared by solid phase synthesis) activated with succinimidyl-6-(β-maleimidopropionamido) hexanoate gave the II-GPR1 conjugate. Introduction of a biotin group in II did not modify the fixation of envelope gp120 protein on II and induced the exposure of gp120 epitope CD4i in the presence of antibodies 17b.

IT 1005501-32-5DP, biotin-labeled

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of CD4 peptide-biotin conjugate capable to induce exposure of gp120 epitope CD4i in the presence of antibodies 17b)

RN 1005501-32-5 HCAPLUS

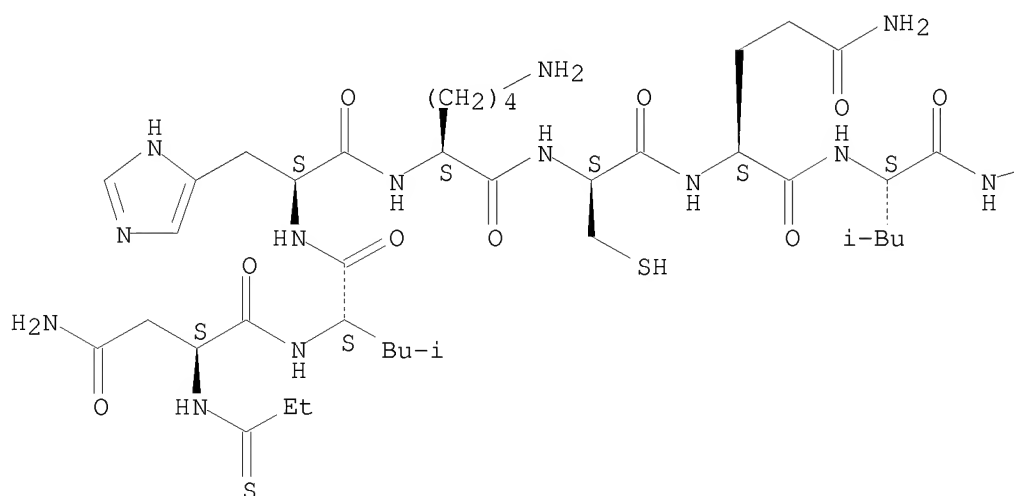
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NTE modified

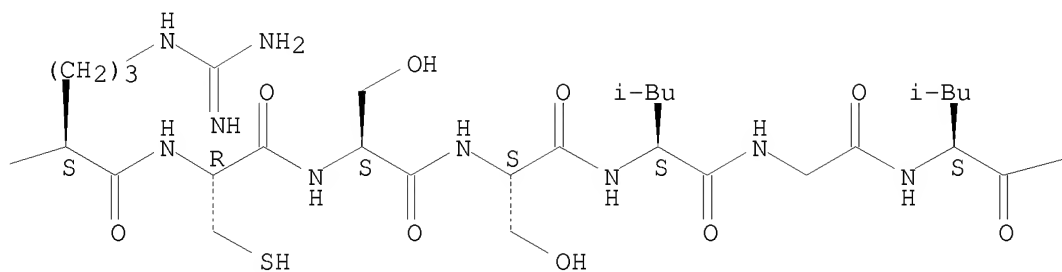
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Absolute stereochemistry.

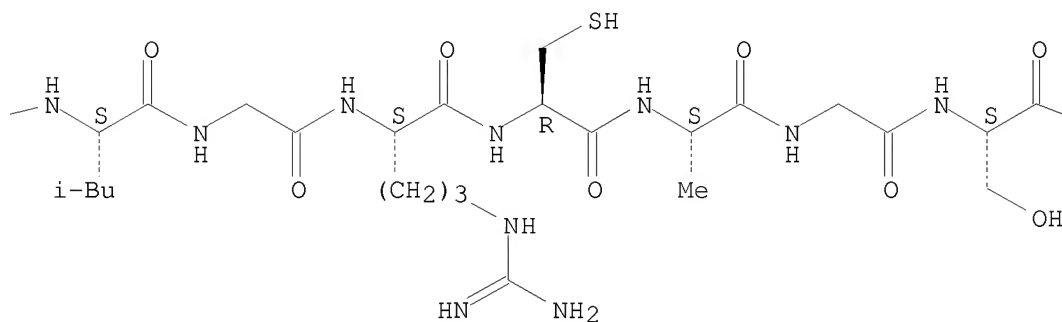
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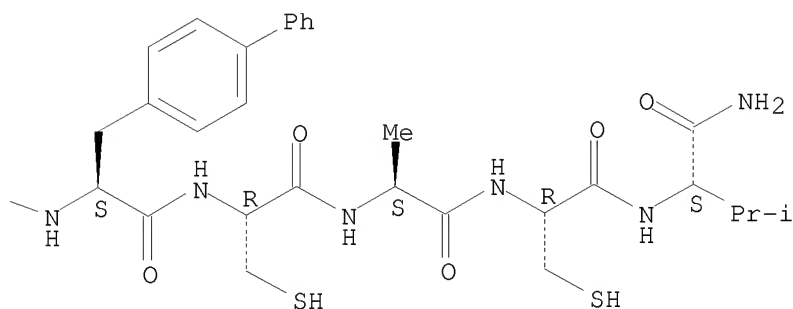
PAGE 1-B



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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of activated CD4 peptides contg. a single lysine residue which is capable of coupling by covalent bonding with sulfanyl-contg. compds. or a modified polyanion contg. a sulfanyl group and their conjugates useful for treating AIDS)

IT 1005501-33-6P

RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent);

USES (Uses)

(preparation of activated CD4 peptides containing a single lysine residue which is capable of coupling by covalent bonding with sulfanyl-containing compds. or a modified polyanion containing a sulfanyl group and their conjugates useful for treating AIDS)

RN 1005501-33-6 HCAPLUS

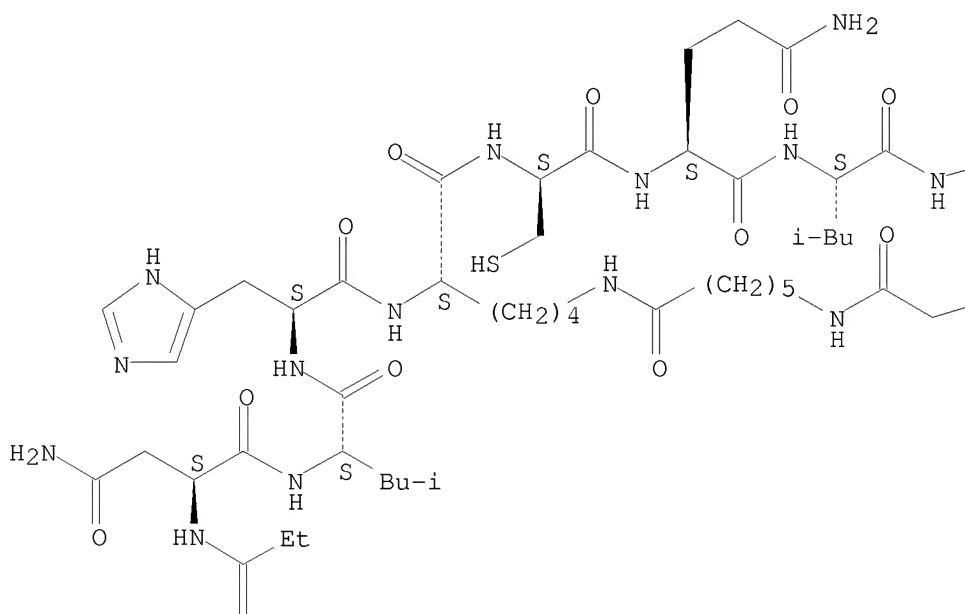
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NTE modified (modifications unspecified)

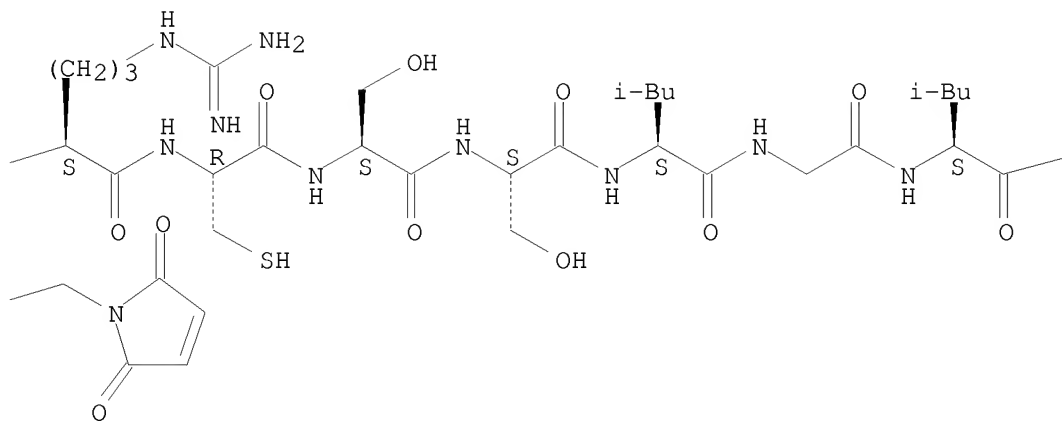
SEQ 1 NLHKCQLRCS SLGLLGRCAG SACACV

Absolute stereochemistry.

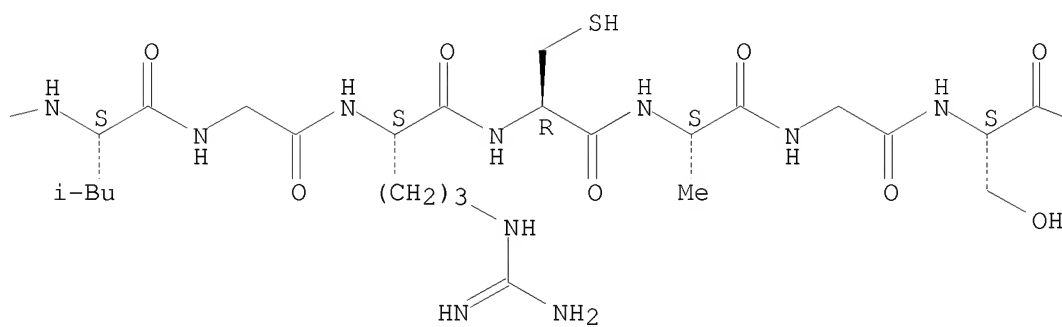
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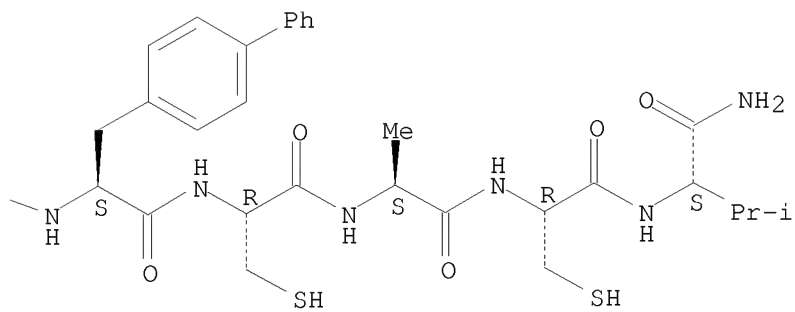
PAGE 1-B



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IT 1005501-34-7P 1005501-36-9P 1005501-37-0P
1005738-20-4P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of activated CD4 peptides containing a single lysine residue which

is capable of coupling by covalent bonding with sulfanyl-containing compds. or a modified polyanion containing a sulfanyl group and their conjugates useful for treating AIDS)

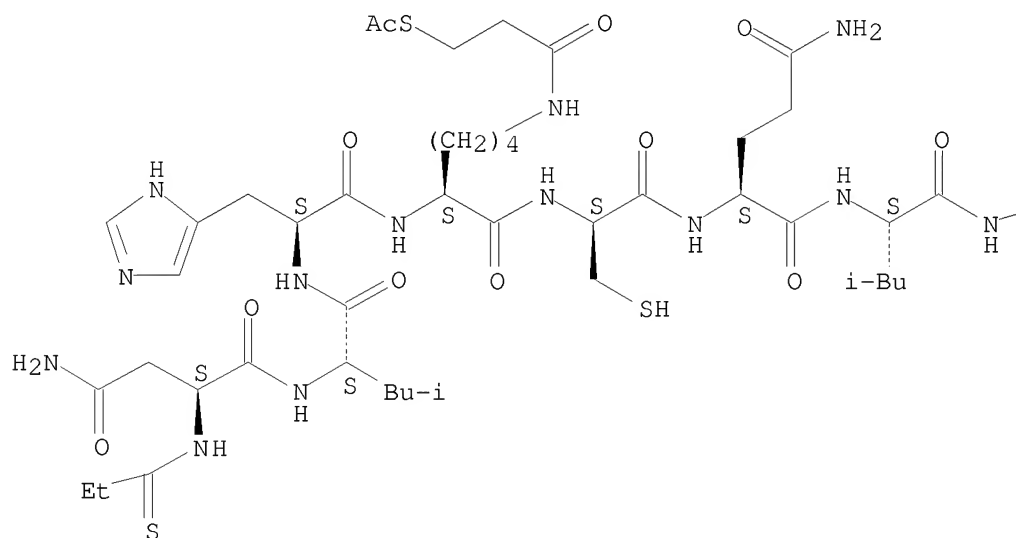
RN 1005501-34-7 HCAPLUS

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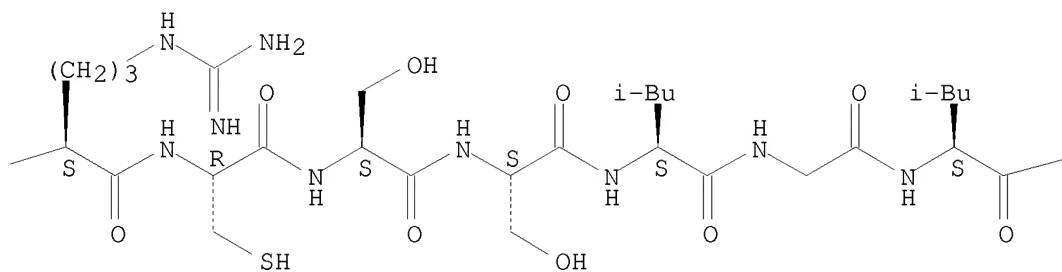
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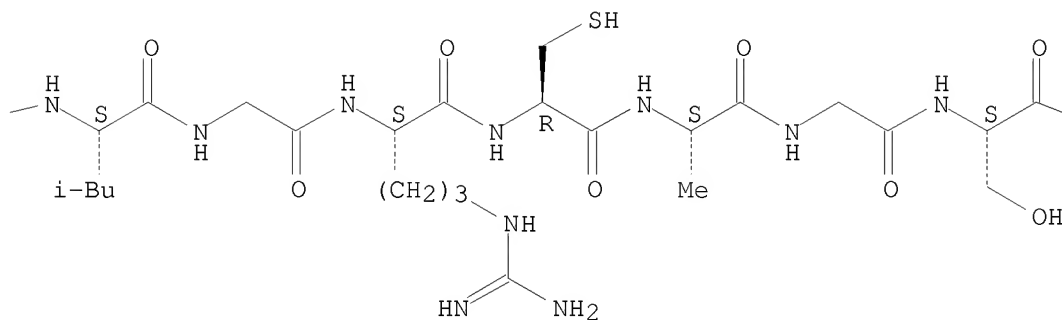
Absolute stereochemistry.



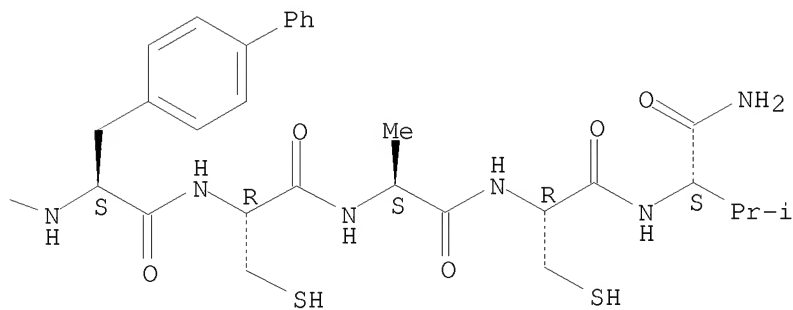
PAGE 1-B



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RN 1005501-36-9 HCAPLUS
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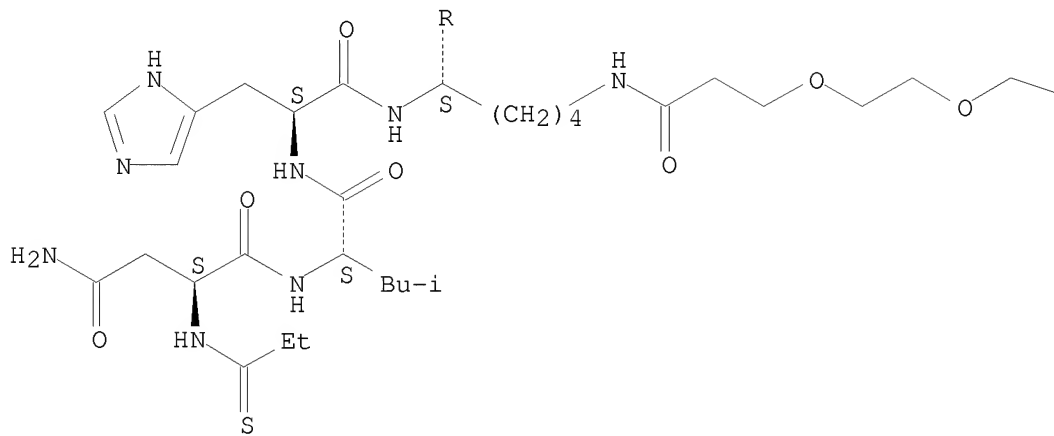
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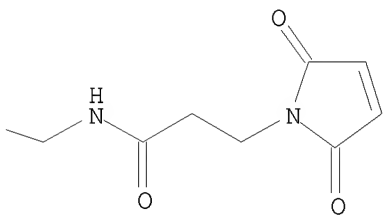
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Absolute stereochemistry.

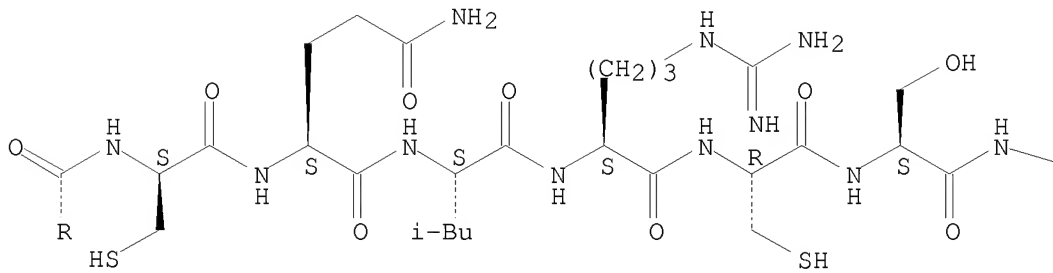
PAGE 1-A



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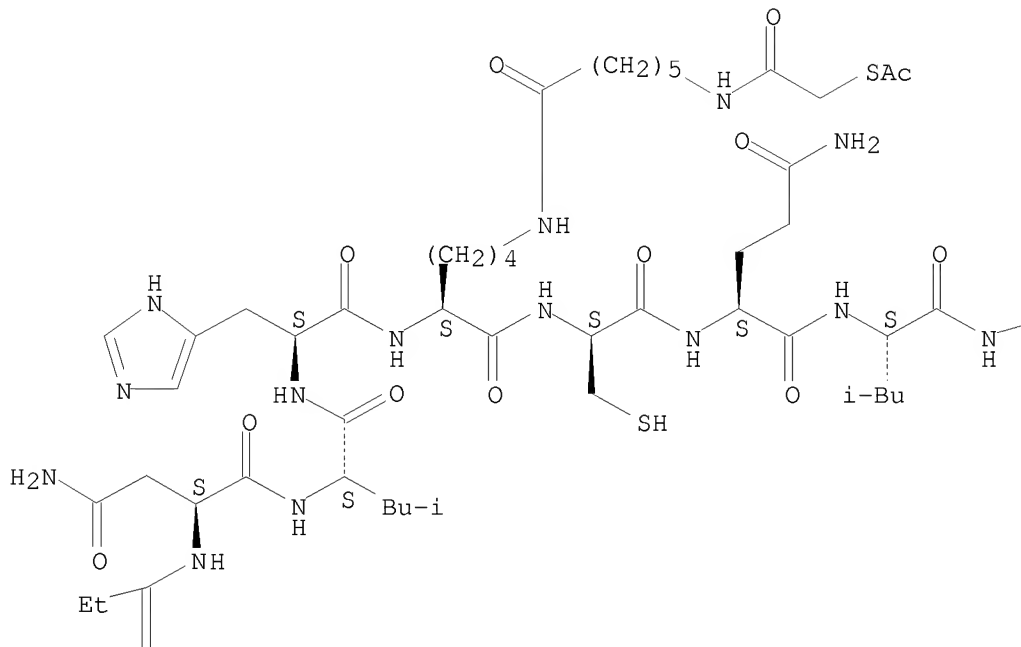
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NTE	modified	

SEQ

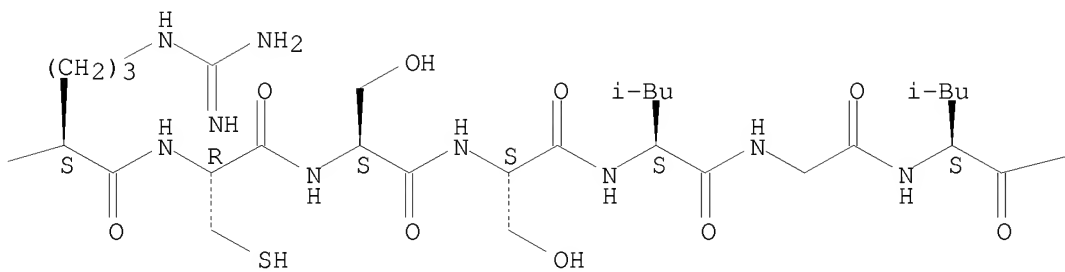
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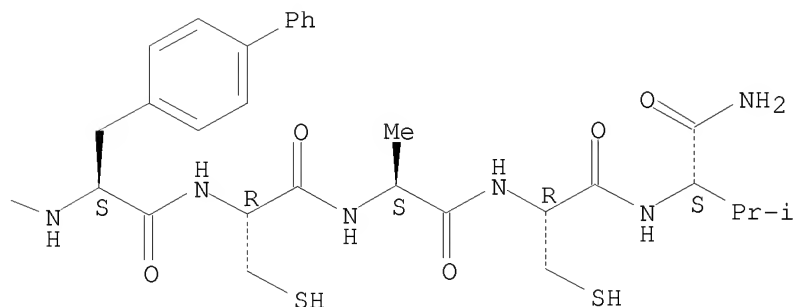
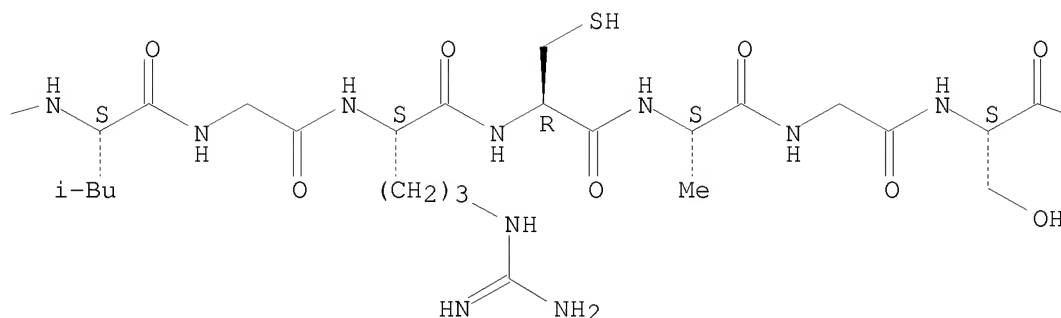
Absolute stereochemistry.

PAGE 1-A



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RN 1005738-20-4 HCAPLUS
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INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 MEDLEETLFE EFENYSYDLDD YYSLESC
1 NLHKCQLRCS SLGLLGRCAG SACACV

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2008:97050 HCAPLUS
DOCUMENT NUMBER: 148:190119
TITLE: CD4 mimic peptides or multivalent compounds comprising
co-receptor-gp120 binding and/or virus-cell fusion
inhibitors for use as anti-HIV therapeutics,
diagnostics or vaccines
INVENTOR(S): Vita, Claudio; Martin, Loiec; Stricher, Francois;
Descours, Anne; Morellato, Laurence
PATENT ASSIGNEE(S): Commissariat a l'Energie Atomique, Fr.; Sauvage-Vita,
Mireille; Vita, Fabio; Vita, Elena
SOURCE: PCT Int. Appl., 73pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008010088	A2	20080124	WO 2007-IB2686	20070509
WO 2008010088	A3	20080403		
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RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			
WO 2007144685	A1	20071221	WO 2006-IB2332	20060613
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

PRIORITY APPLN. INFO.: WO 2006-IB2332 A 20060613

OTHER SOURCE(S): MARPAT 148:190119

AB An isolated peptide comprising the sequence (I): TPA-Asn-Leu-His-Phe-Cys-Gln-Leu-Xaaa-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Arg-Cys-Xaab-Xaac-Xaad-Xaae-Cys-Ala-Cys-Val-NH₂, wherein: TPA represents thiopropionic acid; Xaaa represents Arg, Lys; Xaab represents Ala, Arg; Xaac represents a D-amino acid; Xaad represents Thr, Ser, Asn; Xaae represents phenylalanine or a phenylalanine derivative having the structure (II), where A is absent or represents S, O, NH or CH₂, B is absent or represents a C1 to C6 branched or straight-chain alkyl, and R represents a C3 to C6 alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, cycloalkenyl, cycloheterocycloalkenyl, aryl, or heteroaryl, and the use of the peptide for manufacturing anti-HIV

therapeutic

or vaccine compns. are disclosed herein.

IT 1002724-68-6P

RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)

(CD4 mimic peptides or multivalent compds. comprising co-receptor-gp120 binding and/or virus-cell fusion inhibitors for use as anti-HIV therapeutics, diagnostics or vaccines)

RN 1002724-68-6 HCAPLUS

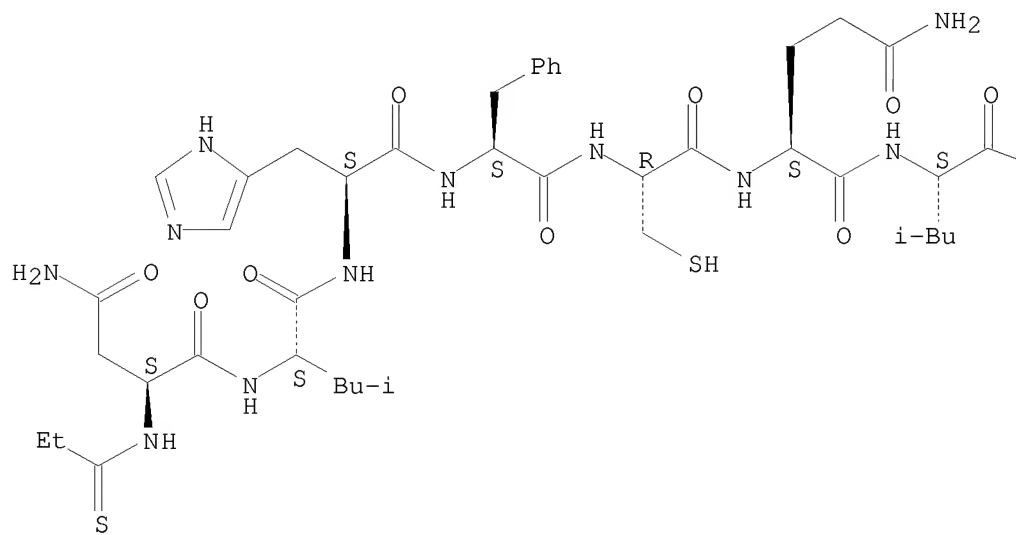
CN L-Valine, N2-(1-thioxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-3-[1,1'-biphenyl]-4-yl-L-alanyl-L-cysteinyl-L-alanyl-L-cysteinyl- (CA INDEX NAME)

NTE modified (modifications unspecified)

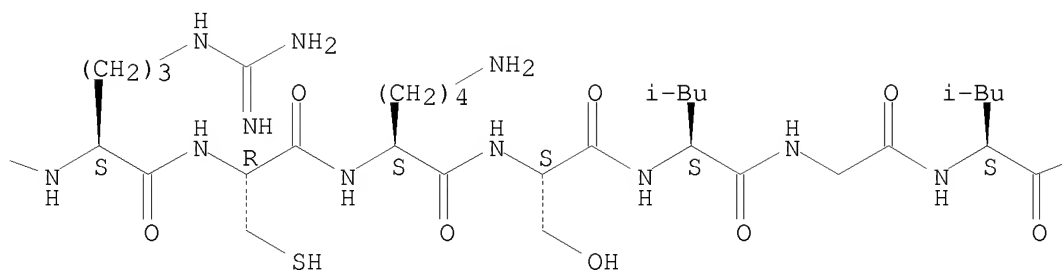
SEQ 1 NLHFCQLRCK SLGLLGKCAG SFCACV

Absolute stereochemistry.

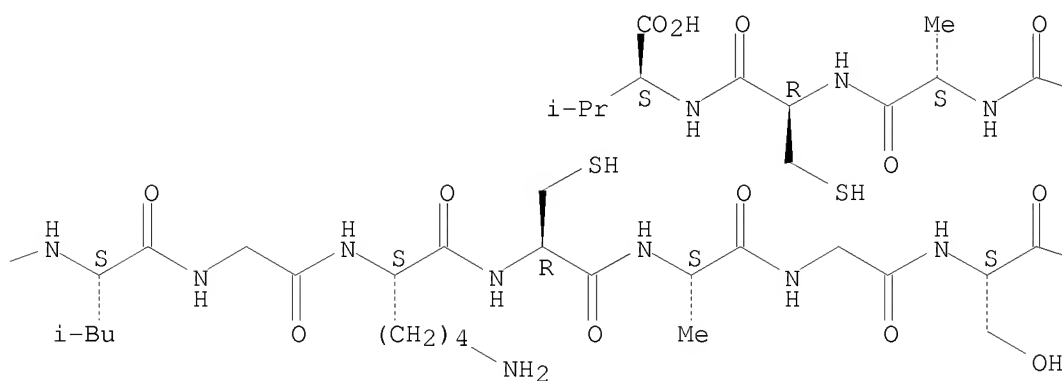
PAGE 1-A



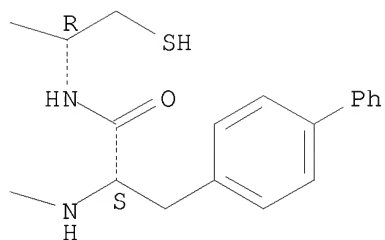
PAGE 1-B



PAGE 1-C



PAGE 1-D



L4 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2007:1455156 HCAPLUS
 DOCUMENT NUMBER: 148:93216
 TITLE: CD4 mimic peptides and use for anti-HIV therapeutic or vaccine compositions
 INVENTOR(S): Vita, Claudio; Martin, Loiec; Stricher, Francois; Descours, Anne; Morellato, Laurence

PATENT ASSIGNEE(S): Commissariat a l'Energie Atomique, Fr.; Sauvage-Vita, Mireille; Vita, Fabio; Vita, Elena
 SOURCE: PCT Int. Appl., 75 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007144685	A1	20071221	WO 2006-IB2332	20060613
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
WO 2008010088	A2	20080124	WO 2007-IB2686	20070509
WO 2008010088	A3	20080403		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				

PRIORITY APPLN. INFO.: WO 2006-IB2332 A 20060613

OTHER SOURCE(S): MARPAT 148:93216

AB The invention discloses peptides (preparation =described) comprising the sequence TPA-Asn-Leu-His-Phe-Cys-Gln-Leu-Xaaa-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Arg-Cys-Xaab-Xaac-Xaad-Xaae-Cys-Ala-Cys-Val-NH2 [TPA = thiopropionic acid; Xaaa = Arg, Lys; Xaab = Ala, Arg; Xaac = D-amino acid; Xaad = Thr, Ser, Asn; Xaae = Phe, Phe derivative having Ph para substituent ABnR (A absent or = S, O, NH, CH2; B absent or = C1-6 (un)branched alkyl; R = C3-6 alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, cycloalkenyl, cycloheterocycloalkenyl, aryl, heteroaryl)], as well as use of the peptides for manufacturing anti-HIV therapeutic or vaccine compns.

IT 491596-19-1

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); PRP (Properties); BIOL (Biological study)
 (CD4 mimic peptides for anti-HIV therapeutic or vaccine compns.)

RN 491596-19-1 HCAPLUS

CN L-Valinamide, N2-(1-thioxopropyl)-L-asparaginy-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-glutaminy-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-3-[1,1'-biphenyl]-4-yl-L-alanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (5→23), (9→25)-bis(disulfide) (CA INDEX NAME)

NTE modified

SEQ 1 NLHFCQLRCK SLGLLGKCAG SFCACV

IT 858280-93-0
RL: PAC (Pharmacological activity); PRP (Properties); BIOL (Biological study)
(CD4 mimic peptides for anti-HIV therapeutic or vaccine compns.)
RN 858280-93-0 HCAPLUS
CN L-Valinamide, N2-(1-thioxopropyl)-L-asparaginy-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-glutaminy-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (5→23), (9→25)-bis(disulfide) (CA INDEX NAME)

NTE modified

SEQ 1 NLHFCQLRCK SLGLLGKCAG SFCACV

IT 1000096-91-2
RL: PRP (Properties)
(unclaimed protein sequence; CD4 mimic peptides and use for anti-HIV therapeutic or vaccine compns.)
RN 1000096-91-2 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-His-Phe-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (CA INDEX NAME)

SEQ 1 XNLHFCQLRC KSLGLLGKCA GSXCACV

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:497126 HCAPLUS

DOCUMENT NUMBER: 147:166616

TITLE: Synthesis and anti-HIV activity of trivalent CD4-mimetic miniproteins

AUTHOR(S): Li, Hengguang; Guan, Yongjun; Szczepanska, Agnieszka; Moreno-Vargas, Antonio J.; Carmona, Ana T.; Robina, Inmaculada; Lewis, George K.; Wang, Lai-Xi

CORPORATE SOURCE: Institute of Human Virology, University of Maryland, Baltimore, MD, 21201, USA

SOURCE: Bioorganic & Medicinal Chemistry (2007), 15(12), 4220-4228

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 147:166616

AB A series of trivalent CD4-mimetic miniproteins was synthesized, in which three CD4M9 miniprotein moieties were tethered on a threefold-sym. scaffold. The trivalent miniproteins were designed to target the CD4-binding sites displayed in the trimeric gp120 complex of HIV-1. The synthesis took advantage of the highly efficient ligation between a cysteine-tagged CD4M9 miniprotein and a suitable trivalent maleimide that varied in the nature and length of spacer. Antiviral assay revealed that

most of the synthetic trivalent miniproteins demonstrated significantly enhanced anti-HIV activities over the monomeric CD4M9 against both R5- and X4-tropic viruses, indicating the beneficial multivalent effects. One compound that possesses a hydrophobic linker was shown to be 140-fold more active than CD4M9 against HIV-1Bal infection, implicating a pos. contribution of the lipid portion to the antiviral activity. It was also found that most of the trivalent miniproteins showed comparable anti-HIV activities in comparison with a typical bivalent miniprotein, regardless of the length of the linker. The results implicated a mechanism of the interactions between the multivalent inhibitors and the trimeric gp120 complex.

IT 944044-42-2

RL: PAC (Pharmacological activity); BIOL (Biological study)
(preparation of trivalent CD4-mimetic miniproteins using triazacyclododecane, Kemp's acid or trimesic acid as templates to ligate CD4M9 at C-terminal using spacers, and their anti-HIV activity)

RN 944044-42-2 HCAPLUS

CN L-Cysteinamide, 31S,31'S-[(6,17-dioxo-10,13-dioxo-7,16-diazadocosane-1,22-diyl)bis(2,5-dioxo-1,3-pyrrolidinediyl)]bis[L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutamyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-, cyclic (1→19), (1'→19'), (6→24), (6'→24'), (10→26), (10'→26')-hexakis(disulfide) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

IT 736980-71-5

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of trivalent CD4-mimetic miniproteins using triazacyclododecane, Kemp's acid or trimesic acid as templates to ligate CD4M9 at C-terminal using spacers, and their anti-HIV activity)

RN 736980-71-5 HCAPLUS

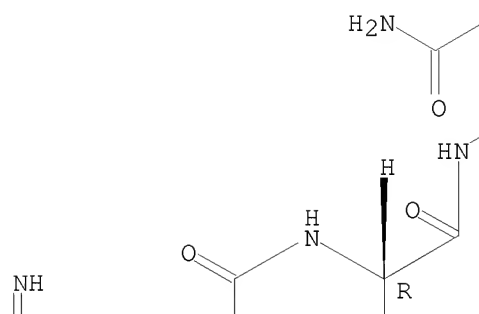
CN L-Cysteinamide, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutamyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-, cyclic (1→19), (6→24), (10→26)-tris(disulfide) (CA INDEX NAME)

NTE modified

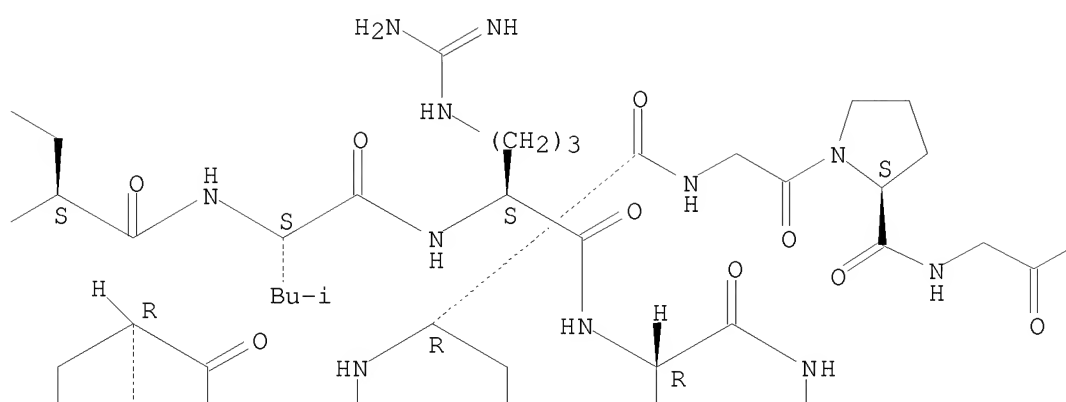
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

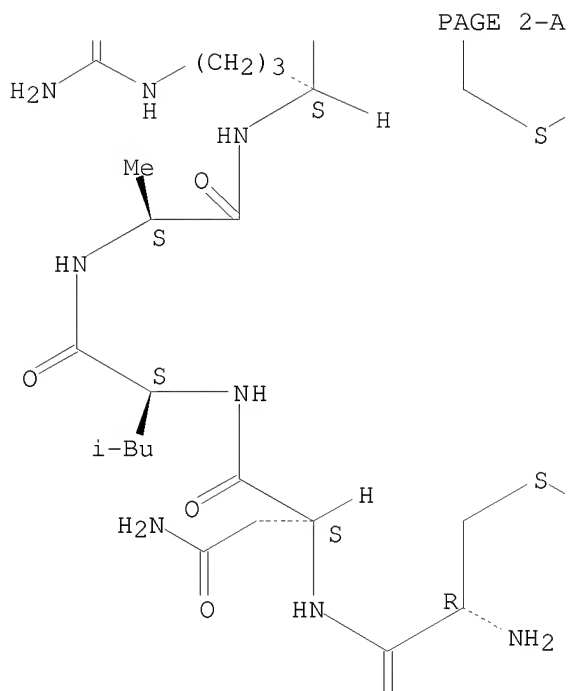
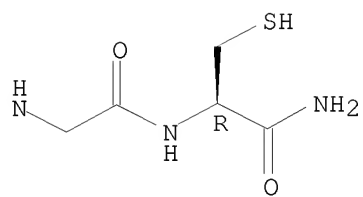
Absolute stereochemistry.

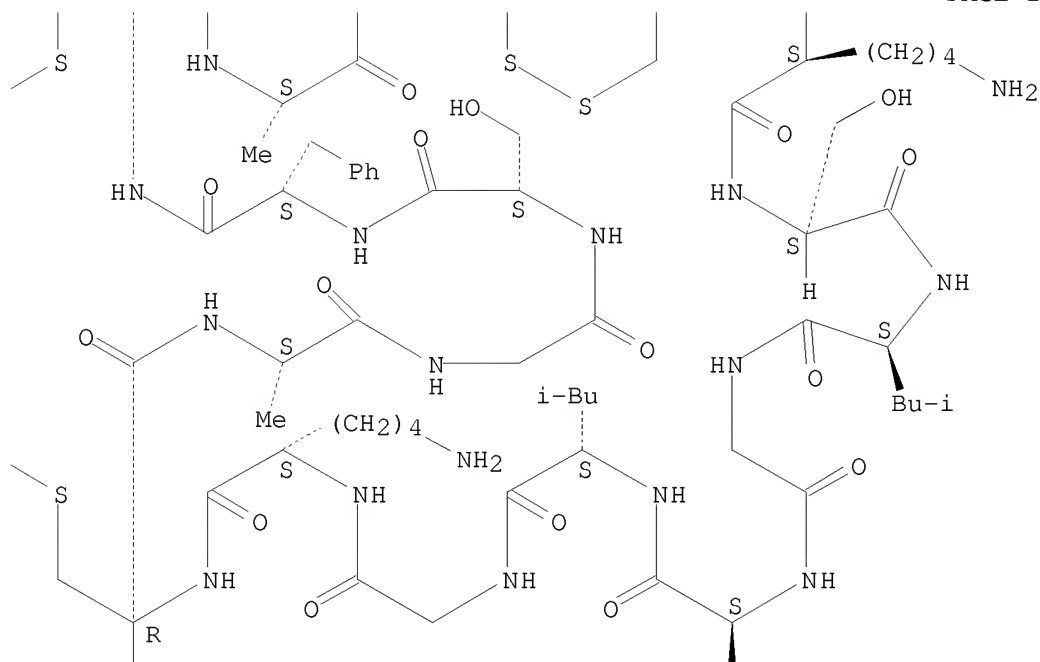
PAGE 1-A



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O

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i-Bu

IT 944044-34-2P 944044-35-3P 944044-36-4P
 944044-37-5P 944044-38-6P 944044-39-7P
 944044-40-0P 944044-41-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of trivalent CD4-mimetic miniproteins using
 triazacyclododecane, Kemp's acid or trimesic acid as templates to
 ligate CD4M9 at C-terminal using spacers, and their anti-HIV activity)

RN 944044-34-2 HCAPLUS

CN L-Cysteinamide, 31S,31'S31''S-[1,5,9-triazacyclododecane-1,5,9-
 triyltris[(3-oxo-3,1-propanediyl)(2,5-dioxo-1,3-pyrrolidinediyl)]]tris[L-
 cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-
 glutamyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-
 leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-
 phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-,
 cyclic (1→19), (1'→19'), (1''→19''), (6→24), (6'.f
 wdarw.24'), (6''→24''), (10→26), (10'→26'), (10''→
 26'')-nonakis(disulfide) (CA INDEX NAME)

NTE multichain
 modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

RN 944044-35-3 HCAPLUS

CN L-Cysteinamide, 31S,31'S31''S-[1,5,9-triazacyclododecane-1,5,9-triyltris[(11-oxo-11,1-undecanediyl)(2,5-dioxo-1,3-pyrrolidinediyl)]]tris[L-cysteinyL-L-asparaginyL-L-leucyl-L-alanyl-L-arginyL-L-cysteinyL-L-glutaminyl-L-leucyl-L-arginyL-L-cysteinyL-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyL-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyL-L-alanyl-L-cysteinyLglycyl-L-prolylglycylglycyl-, cyclic (1→19), (1'→19'), (1''→19'), (6→24), (6'→24'), (6''→24'), (10→26), (10'.fw darw.26'), (10''→26'')-nonakis(disulfide) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

RN 944044-36-4 HCAPLUS

CN L-Cysteinamide, 31S,31'S31''S-[1,5,9-triazacyclododecane-1,5,9-triyltris[(3-oxo-3,1-propanediyl)oxy-2,1-ethanediyl]oxy-2,1-ethanediylimino(3-oxo-3,1-propanediyl)(2,5-dioxo-1,3-pyrrolidinediyl)]]tris[L-cysteinyL-L-asparaginyL-L-leucyl-L-alanyl-L-arginyL-L-cysteinyL-L-glutaminyl-L-leucyl-L-arginyL-L-cysteinyL-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyL-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyL-L-alanyl-L-cysteinyLglycyl-L-prolylglycylglycyl-, cyclic (1→19), (1'→19'), (1''→19'), (6→24), (6'→24'), (6''→24'), (10→26), (10'.fw darw.26'), (10''→26'')-nonakis(disulfide) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

RN 944044-37-5 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), $\alpha, \alpha', \alpha''$ -[1,5,9-triazacyclododecane-1,5,9-triyltris(3-oxo-3,1-propanediyl)]tris[ω -hydroxy-, 31,31',31''-triether with L-cysteinyL-L-asparaginyL-L-leucyl-L-alanyl-L-arginyL-L-cysteinyL-L-glutaminyl-L-leucyl-L-arginyL-L-cysteinyL-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyL-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyL-L-alanyl-L-cysteinyLglycyl-L-prolylglycylglycyl-S-[1-[3-[(2-hydroxyethyl)amino]-3-oxopropyl]-2,5-dioxo-3-pyrrolidinyl]-L-cysteinamide cyclic (1→19), (1'→19'), (1''→19'), (6→24), (6'→24'), (6''→24'), (10.fwda rw.26), (10''→26''), (10''→26'')-nonakis(disulfide) (CA INDEX NAME)

NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

RN 944044-38-6 HCAPLUS
CN L-Cysteinamide, 31S,31'S31''S-[[(1 α ,3 α ,5 α)-1,3,5-trimethyl-1,3,5-cyclohexanetriyl]tris[carbonylimino-2,1-ethanediyl(2,5-dioxo-1,3-pyrrolidinediyl)]]tris[L-cysteinyL-L-asparaginyL-L-leucyl-L-alanyl-L-arginyL-L-cysteinyL-L-glutaminyl-L-leucyl-L-arginyL-L-cysteinyL-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyL-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyL-L-alanyl-L-cysteinyLglycyl-L-prolylglycylglycyl-, cyclic (1 \rightarrow 19), (1' \rightarrow 19'), (1'' \rightarrow 19'), (6 \rightarrow 24), (6' \rightarrow 24'), (6'' \rightarrow 24'), (10 \rightarrow 26), (10'.fw darw.26'), (10'' \rightarrow 26'')-nonakis(disulfide) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

RN 944044-39-7 HCAPLUS
CN L-Cysteinamide, 31S,31'S31''S-[[(1 α ,3 α ,5 α)-1,3,5-trimethyl-1,3,5-cyclohexanetriyl]tris[carbonylimino-2,1-ethanediyl(2,5-dioxo-1,3-pyrrolidinediyl)]]tris[L-cysteinyL-L-asparaginyL-L-leucyl-L-alanyl-L-arginyL-L-cysteinyL-L-glutaminyl-L-leucyl-L-arginyL-L-cysteinyL-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyL-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyL-L-alanyl-L-cysteinyLglycyl-L-prolylglycylglycyl-, cyclic (1 \rightarrow 19), (1' \rightarrow 19'), (1'' \rightarrow 19''), (6 \rightarrow 24), (6' \rightarrow 24'), (6'' \rightarrow 24''), (10 \rightarrow 26), (10' \rightarrow 26'), (10'' \rightarrow 26'')-nonakis(disulfide) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

RN 944044-40-0 HCAPLUS
CN L-Cysteinamide, 31S,31'S31''S-[[(1 α ,3 α ,5 α)-1,3,5-trimethyl-1,3,5-cyclohexanetriyl]tris[carbonylimino-2,1-ethanediyl(2,5-dioxo-1,3-pyrrolidinediyl)]]tris[L-

cysteiny-L-asparaginy-L-leucyl-L-alanyl-L-arginy-L-cysteiny-L-glutaminy-L-leucyl-L-arginy-L-cysteiny-L-lysy-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysy-L-cysteiny-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteiny-L-alanyl-L-cysteinyglycyl-L-prolylglycylglycyl-, cyclic (1→19), (1'→19'), (1''→19''), (6→24), (6'.fwdarw.24'), (6''→24''), (10→26), (10'→26'), (10''→26'')-nonakis(disulfide) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

RN 944044-41-1 HCAPLUS
CN L-Cysteinamide, 31S, 31'S31''S-[1,3,5-benzenetriyltris[carbonylimino-2,1-ethanediylloxy-2,1-ethanediylloxy-2,1-ethanediyl(2,5-dioxo-1,3-pyrrolidinediyl)]]tris[L-cysteiny-L-asparaginy-L-leucyl-L-alanyl-L-arginy-L-cysteiny-L-glutaminy-L-leucyl-L-arginy-L-cysteiny-L-lysy-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysy-L-cysteiny-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteiny-L-alanyl-L-cysteinyglycyl-L-prolylglycylglycyl-, cyclic (1→19), (1'→19'), (1''→19''), (6→24), (6'→24'), (6''→24''), (10→26), (10'.fwdarw.26'), (10''→26'')-nonakis(disulfide) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:220065 HCAPLUS
DOCUMENT NUMBER: 146:272536
TITLE: DNA vaccines encoding chimeric protein of viral coat protein and CD4 virus receptor for preventing and treating viral infection
INVENTOR(S): Devico, Anthony L.; Fouts, Timothy; Tusken, Robert G.
PATENT ASSIGNEE(S): University of Maryland Biotechnology Institute, USA
SOURCE: PCT Int. Appl., 127pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007024976	A2	20070301	WO 2006-US32957	20060823

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2005-710646P P 20050823

AB The invention relates to chimeric mols. comprising a virus coat sequence and a receptor sequence that can inter-act with each other to form a complex that is capable of binding a co- receptor. Such chimeric mols. therefore exhibit functional properties characteristic of a receptor-coat protein complex and are useful as agents that inhibit virus infection of cells due to occupancy of a co-receptor present on the cell. In particular aspects, the chimeric polypeptide includes an immunodeficiency virus envelope polypeptide, such as that of HIV, SIV, FIV, FeLV, FPV and herpes virus. Receptor sequences suitable for use in a chimeric polypeptide include, for example, CD4 receptors, fragments and mimetic thereof. DNA vaccines comprising nucleotide sequences encoding for such chimeric mols. is another aspect of the present invention.

IT 927453-22-3P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(amino acid sequence; DNA vaccines encoding chimeric protein of HIV gp120 envelope protein and CD4 D1D2 domains for preventing and treating viral infection)

RN 927453-22-3 HCAPLUS

CN Envelope protein gp120env (Human immunodeficiency virus strain BaL_n substitution deriv.) fusion protein with peptide (synthetic linker) fusion protein with CD4 (antigen) (Human D1 plus D2 domain mimicking fragment) (CA INDEX NAME)

SEQ 1 MPMGSLQPLA TLYLLGMLVA SCLGNAEEKL WVTVYYGVPV WKEATTTLFC
51 ASDRKAYDTE VHNVWATHAC VPTDPNPQEV ELKNVTENFN MWKNNMVEQM
101 HEDIISLWDQ SLKPCVKLTP LCVTLNCTDL RNATNGNDTN TTSSSRGMVG
151 GGEMKNCSFN ITTNIRGKVQ KEYALFYKLD IAPIDNNSNN RYRLISCNTS
201 VITQACPKVS FEPIPIHYCA PAGFAILKCK DKKFNGKGPC TNVSTVQCTH
251 GIRPVVSTQL LLNGSLAEED VVIRSANFAD NAKVIIIVQLN ESVEINCTRP
301 NNNTRKSIHI GPGRAFYTTG EIIGDIRQAH CNLSRAKWND TLNKIVIKLR
351 EQFGNKTIVF KHSSGGDPEI VTHSFNCGGE FFYCNSTQLF NSTWNVTEES
401 NNTVENNTIT LPCRIKQIIN MWQEVGRAMY APPIRGQIRC SSNITGLLLT
451 RDGGPEDNKT EVFRPGGGDM RDNWRSELYK YKVVKIEPLG VAPTKAKRRV
501 VQREKTGSSG GGGSGSGGGG SGGGAAACNL ARCQLRCKSL GLLGKCAGSF
551 CACGPX

IT 326494-28-4

RL: PRP (Properties)

(unclaimed sequence; dNA vaccines encoding chimeric protein of viral coat protein and CD4 virus receptor for preventing and treating viral infection)

RN 326494-28-4 HCAPLUS

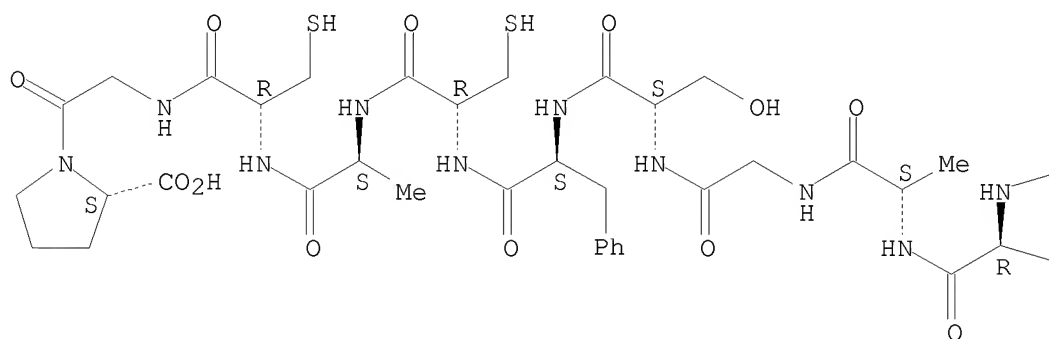
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leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl- (CA INDEX NAME)

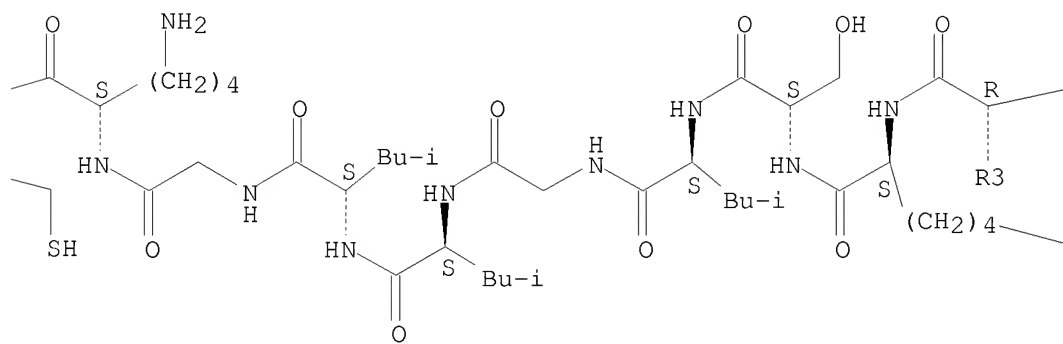
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

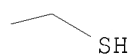
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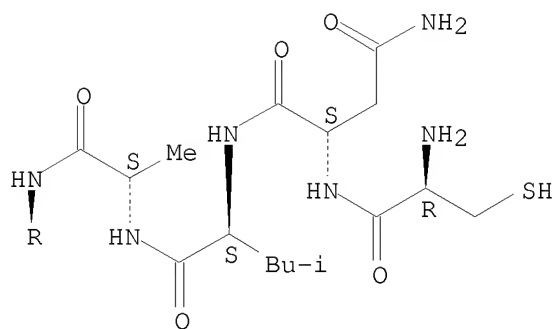
PAGE 1-B



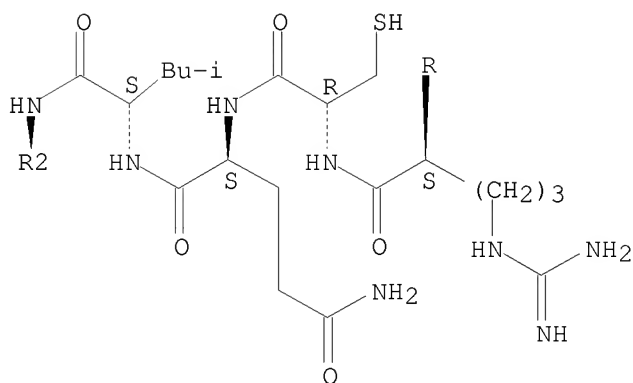
PAGE 1-C



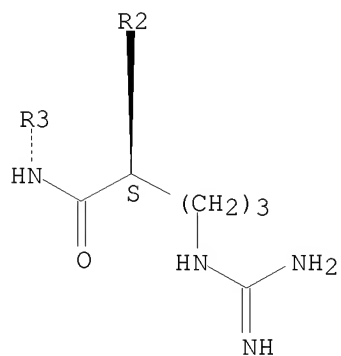
PAGE 2-A



PAGE 3-A



PAGE 4-A



L4 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:83379 HCAPLUS
DOCUMENT NUMBER: 146:204707
TITLE: Chimeric polypeptides comprising viral coat protein
epitope and virus receptor protein mimetic in
combination with G1 cytostatic agents for treating

INVENTOR(S): viral infection
 Heredia, Alonso; Lewis, George; Devico, Anthony L.;
 Fouts, Timothy; Gallo, Robert C.; Redfield, Robert R.
 PATENT ASSIGNEE(S): University of Maryland Biotechnology Institute, USA
 SOURCE: PCT Int. Appl., 91pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007011827	A2	20070125	WO 2006-US27584	20060717
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: US 2005-699952P P 20050715

AB The present invention relates to a combination therapy comprising
 viral-envelope targeting drugs and/or antibodies in combination with G1
 cytostatic agents having the functional activity of reducing transcription
 of CCR5 thereby causing a reduced number of surface receptors for binding of
 HIV gp120.

IT 922196-89-2P
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
 (Preparation); USES (Uses)
 (amino acid sequence; chimeric polypeptides comprising viral coat
 protein epitope and virus receptor protein mimetic in combination with
 G1 cytostatic agents for treating viral infection)

RN 922196-89-2 HCAPLUS

CN Protein FLSC-R/T CD4M9 [506-threonine] (synthetic human immunodeficiency
 virus 1 gp120-CD4 D1D2 domain-myc tag mutant-containing) (CA INDEX NAME)

SEQ 1 MPMGSLQPLA TLYLLGMLVA SCLGNAEEKL WVTVYYGVPV WKEATTTLFC
 51 ASDRKAYDTE VHNVWATHAC VPTDPNPQEV ELKNVTENFN MWKNNMVEQM
 101 HEDIISLWDQ SLKPCVKLTP LCVTLNCTDL RNATNGNDTN TTSSSRGMVG
 151 GGEMKNCSFN ITTNIRGKVQ KEYALFYKLD IAPIDNNSNN RYRLISCNTS
 201 VITQACPKVS FEPIPIHYCA PAGFAILKCK DKKFNGKGPC TNVSTVQCTH
 251 GIRPVVSTQL LLNGSLAEED VVIRSANFAD NAKVIIIVQLN ESVEINCTRP
 301 NNNTRKSIHI GPGRAFYTTG EIIGDIRQAH CNLSRAKWND TLNKIVIKLR
 351 EQFGNKTIVF KHSSGGDPEI VTHSFNCGGE FFYCNSTQLF NSTWNVTEES
 401 NNTVENNTIT LPCRIKQIIN MWQEVGRAMY APPIRGQIRC SSNITGLLLT
 451 RDGGPEDNKT EVFRPGGGDM RDNWRSELYK YKVVKIEPLG VAPTKAKRRV
 501 VQREKTGSSG GGGSGSGGGG SGGGAAACNL ARCQLRCKSL GLLGKCAGSF
 551 CACGPX

IT 326494-28-4

RL: PRP (Properties)
 (unclaimed sequence; chimeric polypeptides comprising viral coat

protein epitope and virus receptor protein mimetic in combination with
G1 cytostatic agents for treating viral infection)

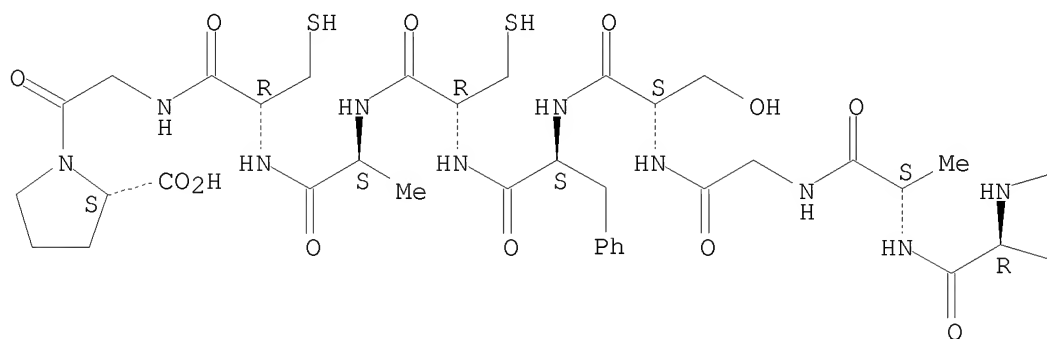
RN 326494-28-4 HCAPLUS

CN L-Proline, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-
cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-
leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-
seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl- (CA INDEX
NAME)

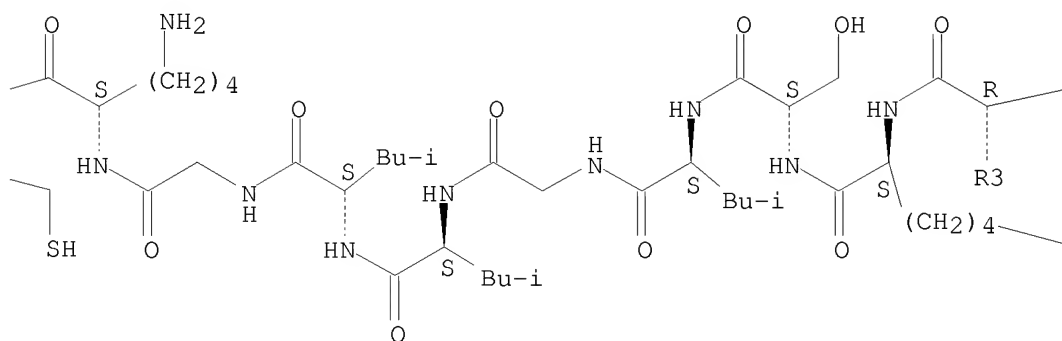
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

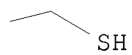
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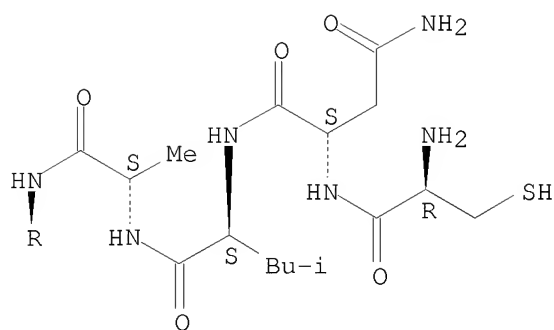
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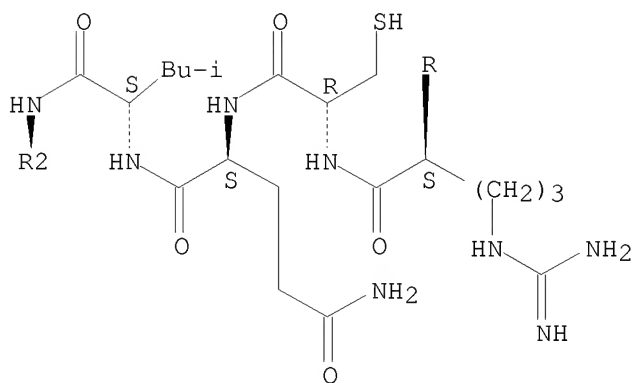
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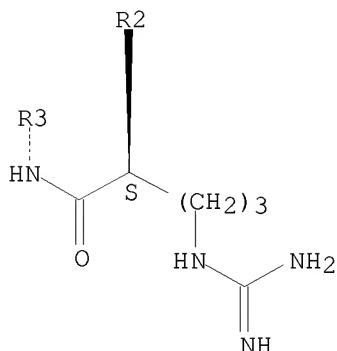


PAGE 2-A



PAGE 3-A





L4 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2007:31308 HCAPLUS
 DOCUMENT NUMBER: 146:120410
 TITLE: Constrained hiv envelope-based immunogen that simultaneously presents receptor and coreceptor binding sites
 INVENTOR(S): Devico, Anthony L.; Lewis, George; Wang, Lai-Xi
 PATENT ASSIGNEE(S): University of Maryland Biotechnology Institute, USA
 SOURCE: PCT Int. Appl., 30pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007005934	A2	20070111	WO 2006-US26136	20060706
WO 2007005934	A3	20070531		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				

PRIORITY APPLN. INFO.: US 2005-697051P P 20050706

AB The present invention relates to a soluble binding complex comprising a soluble gp120 trimer, in which only two gp120 protomers have CD4 binding sites occupied by interconnecting CD4 mimetic moieties, thereby allowing for the exposure of CD4-induced epitopes on the mimetic-bound protomers and an unoccupied CD4 binding site on the third gp120 protomer.

IT 918796-22-2P

RL: BPN (Biosynthetic preparation); PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(CD4M33; constrained HIV envelope-based immunogen that simultaneously presents receptor and coreceptor binding sites)

RN 918796-22-2 HCAPLUS

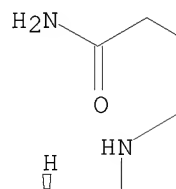
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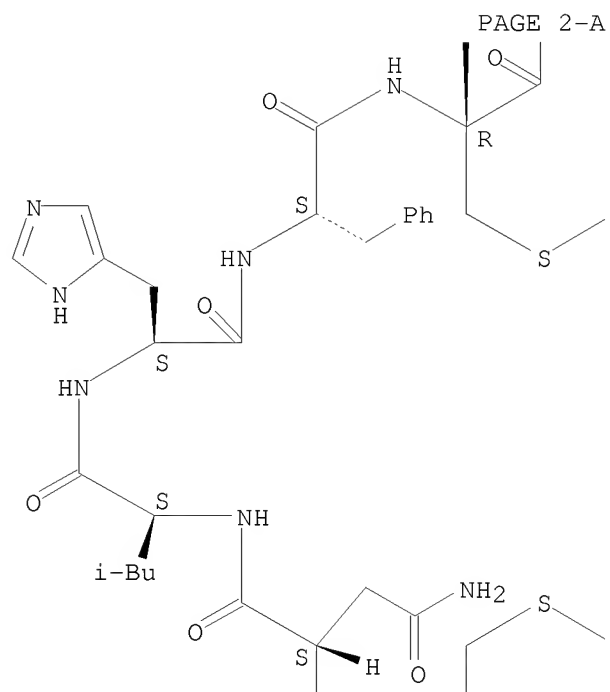
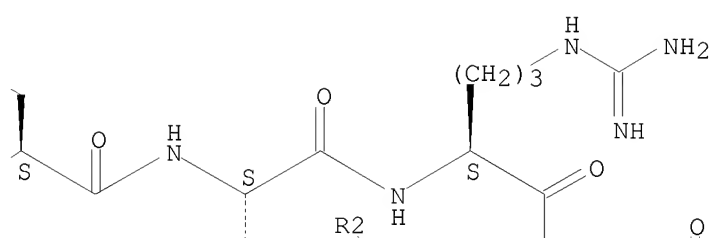
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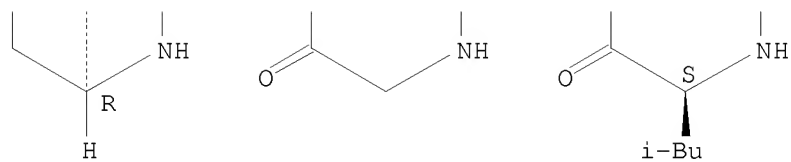
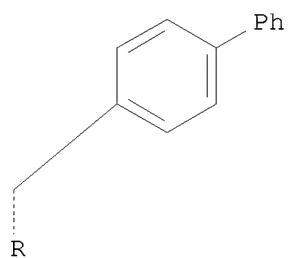
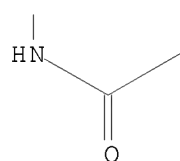
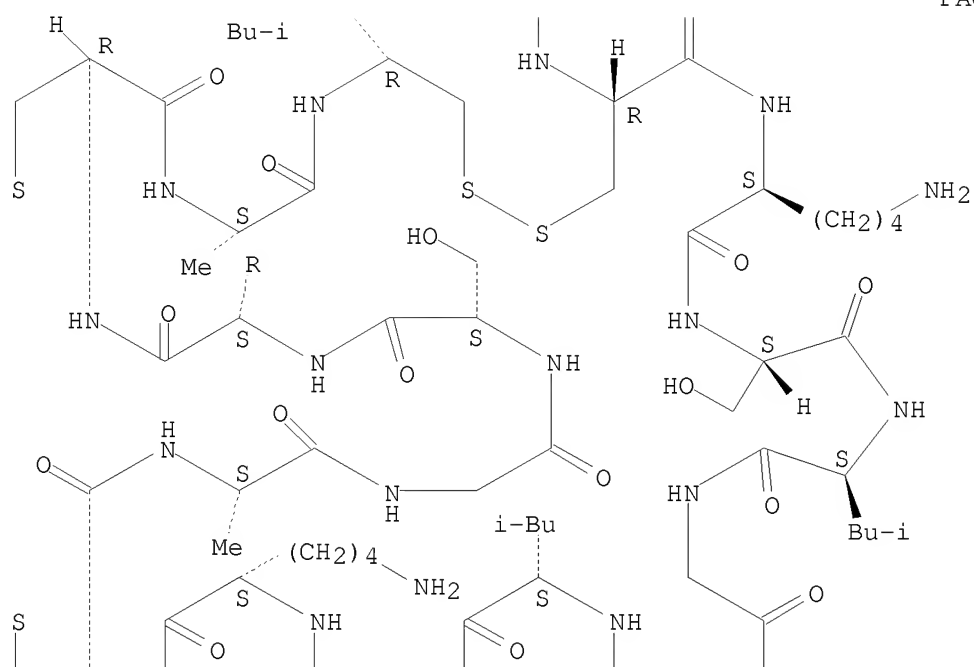
SEQ 1 XNLHFCQLRC KSLGLLGKCA GSFCACV

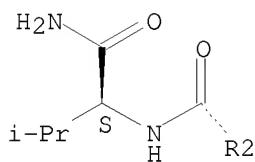
Absolute stereochemistry.

PAGE 1-A









IT 918796-21-1P

RL: BPN (Biosynthetic preparation); PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(CD4M9; constrained HIV envelope-based immunogen that simultaneously presents receptor and coreceptor binding sites)

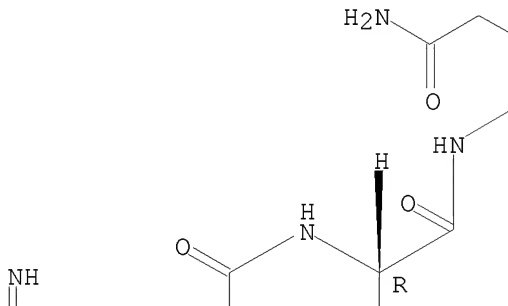
RN 918796-21-1 HCAPLUS

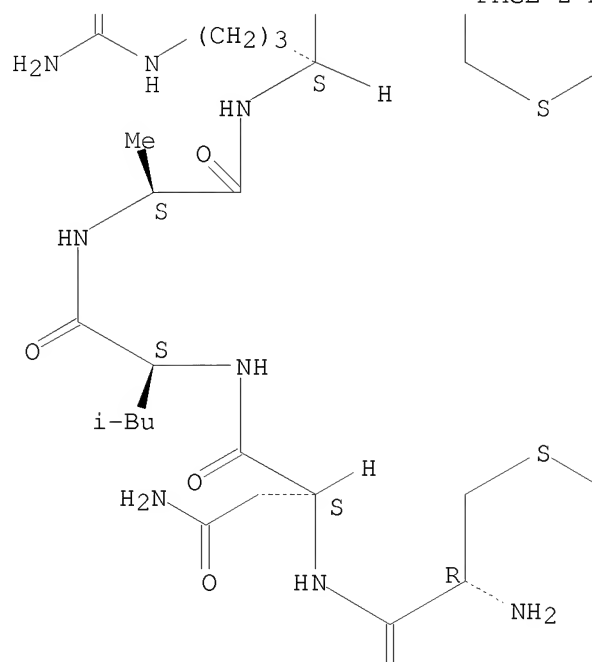
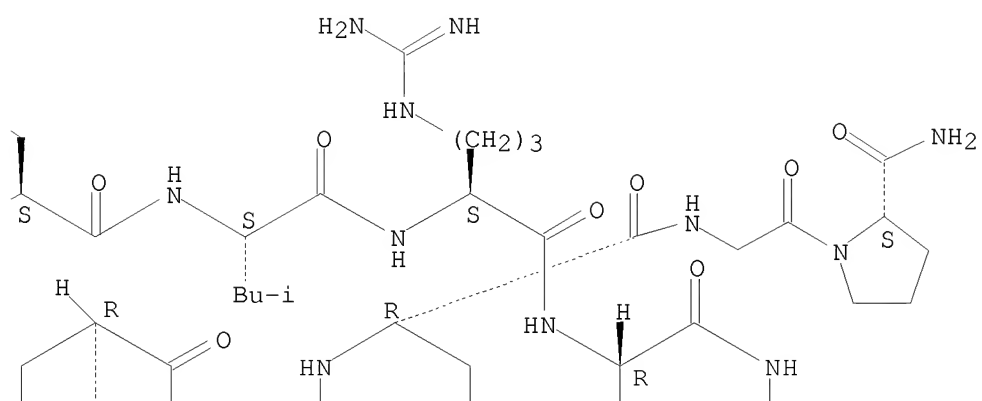
CN L-Prolinamide, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanyl-glycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-, cyclic (1→19), (6→24), (10→26)-tris(disulfide) (CA INDEX NAME)

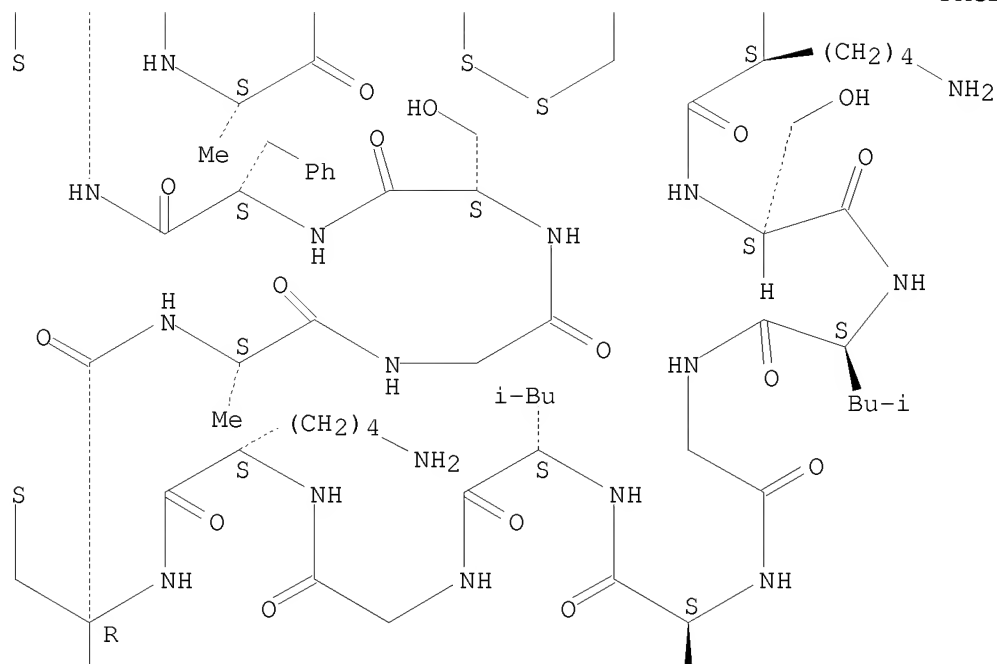
NTE modified

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.







O

H

i-Bu

L4 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2005:735299 HCAPLUS
 DOCUMENT NUMBER: 143:206390
 TITLE: Enhancing anti-HIV efficiency through multivalent inhibitors targeting oligomeric gp120
 INVENTOR(S): Wang, Lai-Xi; Li, Hengguang
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 21 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050176642	A1	20050811	US 2005-54398	20050209
PRIORITY APPLN. INFO.:			US 2004-542916P	P 20040209
			US 2004-548059P	P 20040226

AB The invention discloses multivalent HIV inhibitors that bind to multiple sites on a trimeric gp120 complex, thereby blocking the CD4 binding site on the trimeric gp120 complex and inhibiting the attachment and entry of

HIV through gp120-CD4 interactions. The multivalent HIV inhibitors of the invention include (a) at least 2 gp120-binding mols. that target the CD4 binding pocket on a trimeric HIV gp120 complex and (b) a spacer/linker. The gp120-binding mol. is e.g. peptide CD4M9. Preparation of CD4M9 dimers with spacers of different lengths is described.

IT 736980-71-5P

RL: PAC (Pharmacological activity); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(anti-HIV efficiency enhancement with multivalent inhibitors targeting oligomeric gp120)

RN 736980-71-5 HCAPLUS

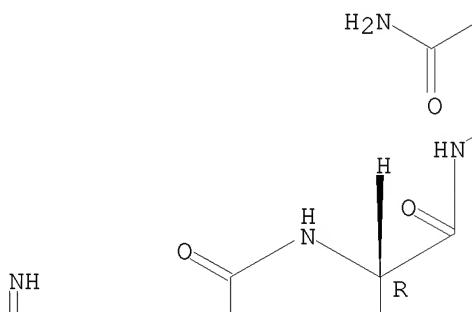
CN L-Cysteinamide, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanyl-glycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-, cyclic (1→19), (6→24), (10→26)-tris(disulfide) (CA INDEX NAME)

NTE modified

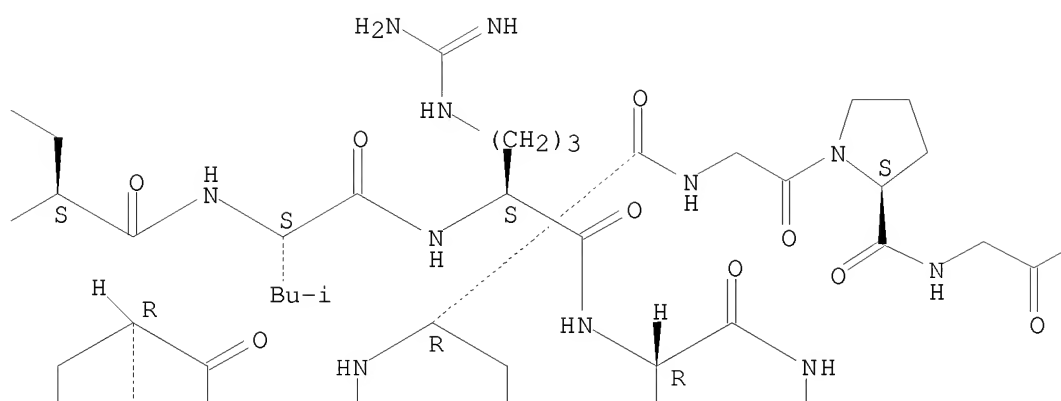
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

Absolute stereochemistry.

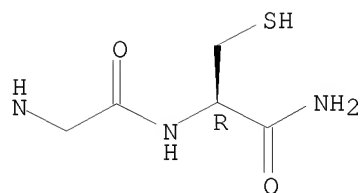
PAGE 1-A

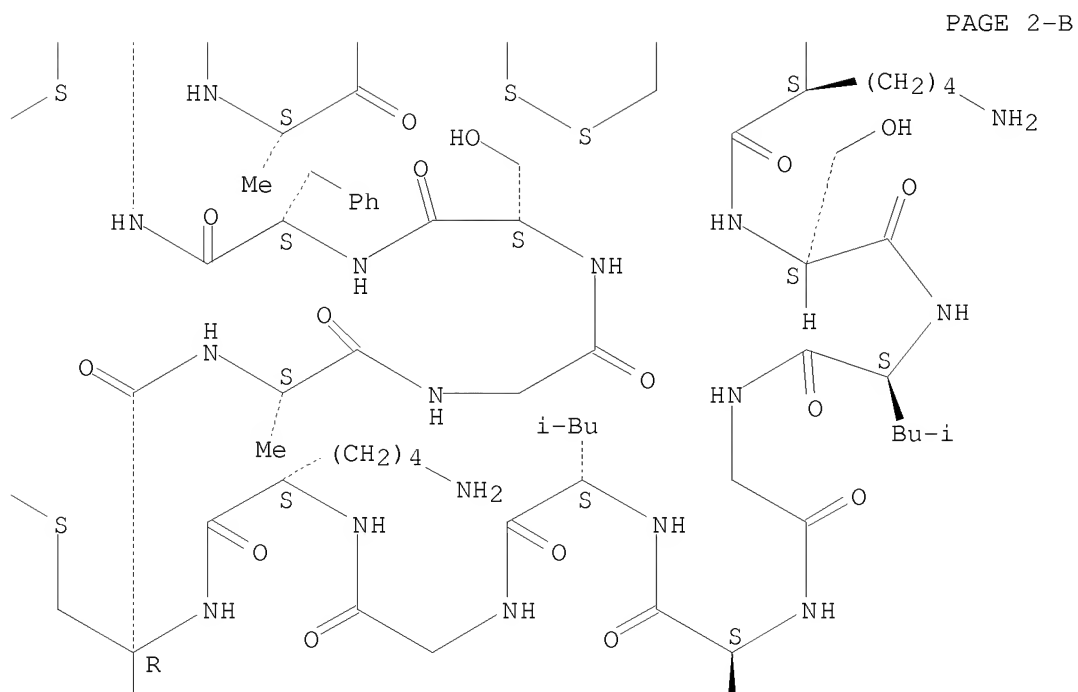
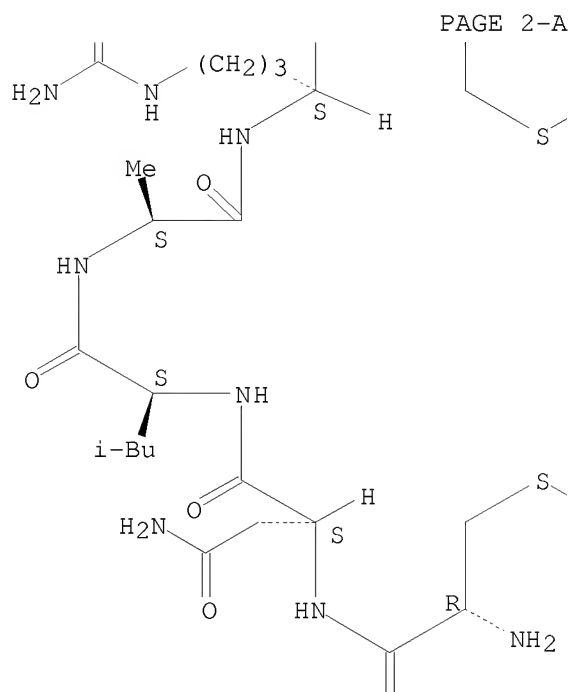


PAGE 1-B



PAGE 1-C





H

i-Bu

IT 737755-79-2P
 RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (anti-HIV efficiency enhancement with multivalent inhibitors targeting oligomeric gp120)

RN 737755-79-2 HCAPLUS
 CN L-Cysteinamide, 31S,31'S-[(1,8,19,26-tetraoxo-12,15-dioxo-2,9,18,25-tetraazahexacosane-1,26-diyl)bis[4,1-cyclohexanediylmethylene(2,5-dioxo-1,3-pyrrolidinediyl)]]bis[L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-, cyclic (1→19), (1'→19'), (6→24), (6'→24'), (10→26), (10'→26')-hexakis(disulfide) (9CI)
 (CA INDEX NAME)

NTE multichain
 modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

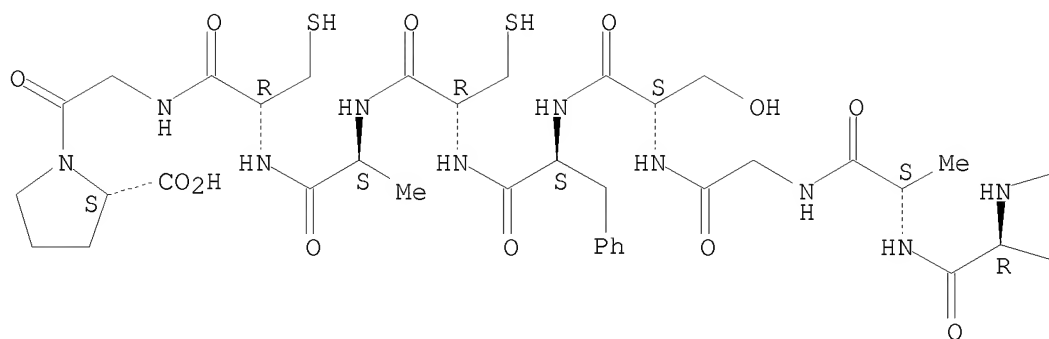
IT 326494-28-4D, linker/spacer conjugates 861926-86-5D,
 linker/spacer conjugates
 RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (anti-HIV efficiency enhancement with multivalent inhibitors targeting oligomeric gp120)

RN 326494-28-4 HCAPLUS
 CN L-Proline, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl- (CA INDEX NAME)

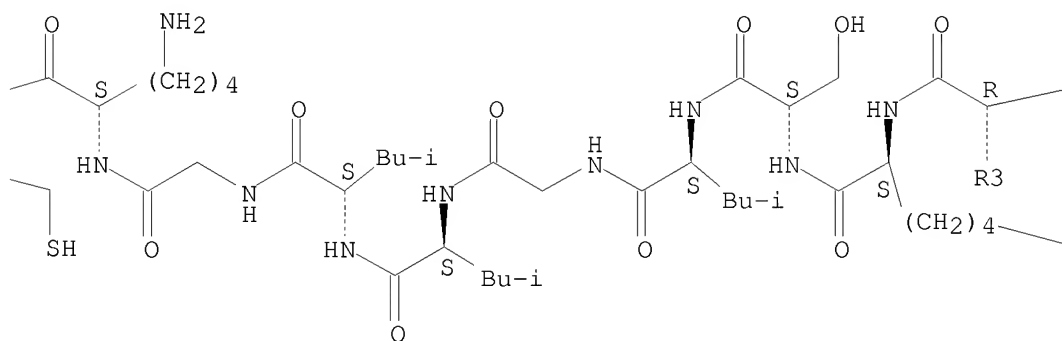
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

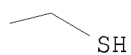
PAGE 1-A



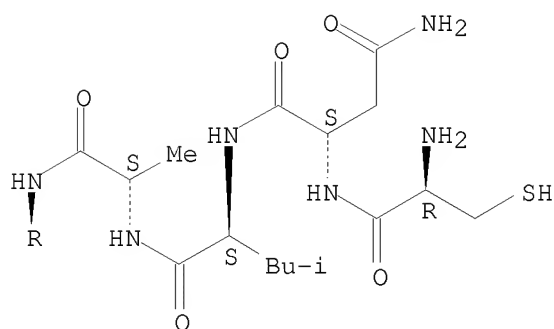
PAGE 1-B



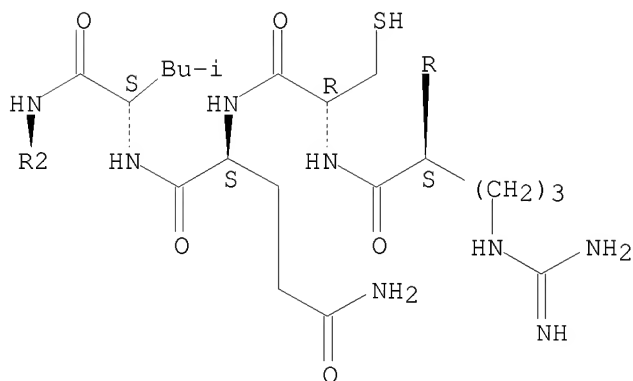
PAGE 1-C



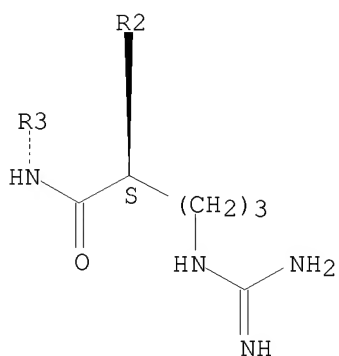
PAGE 2-A



PAGE 3-A



PAGE 4-A



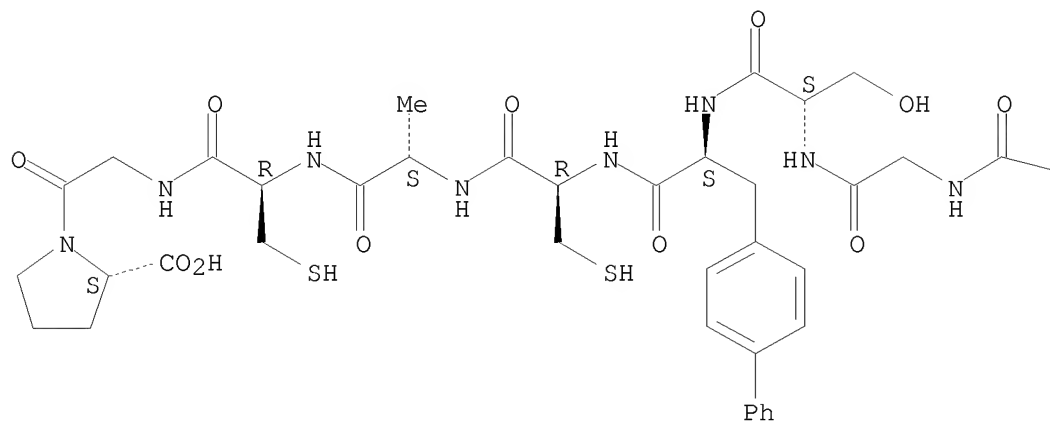
RN 861926-86-5 HCAPLUS
 CN L-Proline, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-alanyl-L-
 arginyl-L-cysteinyl-L-glutamyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-
 seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-
 alanylglycyl-L-seryl-3-[1,1'-biphenyl]-4-yl-L-alanyl-L-cysteinyl-L-alanyl-
 L-cysteinylglycyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

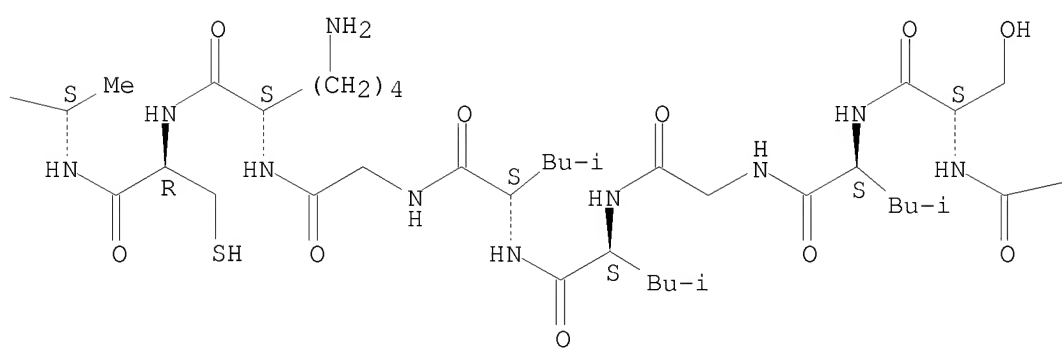
SEQ 1 NLARCQLRCK SLGLLGKCAG SFCACGP

Absolute stereochemistry.

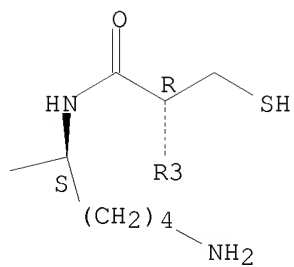
PAGE 1-A



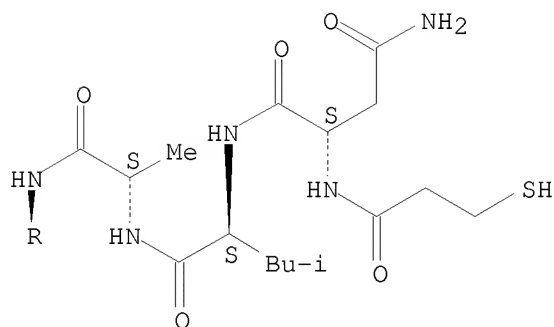
PAGE 1-B



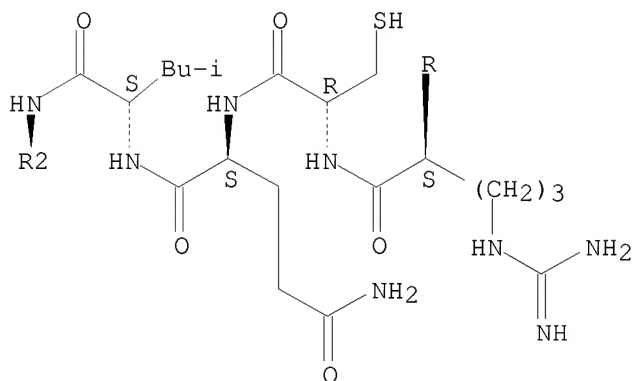
PAGE 1-C



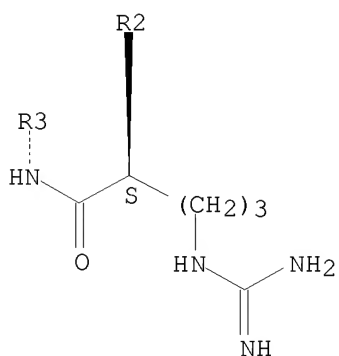
PAGE 2-A



PAGE 3-A



PAGE 4-A



IT 737755-77-0P 737755-78-1P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)
 (anti-HIV efficiency enhancement with multivalent inhibitors targeting
 oligomeric gp120)
 RN 737755-77-0 HCAPLUS
 CN L-Cysteinamide, 31S,31'S-[oxybis[2,1-ethanediyloxy-2,1-ethanediyl(2,5-
 dioxo-1,3-pyrrolidinediyl)]]bis[L-cysteinyl-L-asparaginyL-L-leucyl-L-

alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-, cyclic (1→19), (1'→19'), (6→24), (6'→24'), (10→26), (10'→26')-hexakis(disulfide) (9CI) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

RN 737755-78-1 HCAPLUS
CN L-Cysteinamide, 31S,31'S-[(6,17-dioxo-10,13-dioxo-7,16-diazadocosane-1,22-diyl)bis(2,5-dioxo-1,3-pyrrolidinediyl)]bis[L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-, cyclic (1→19), (1'→19'), (6→24), (6'→24'), (10→26), (10'→26')-hexakis(disulfide) (9CI) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

IT 736980-69-1P 736980-70-4P
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(anti-HIV efficiency enhancement with multivalent inhibitors targeting oligomeric gp120)

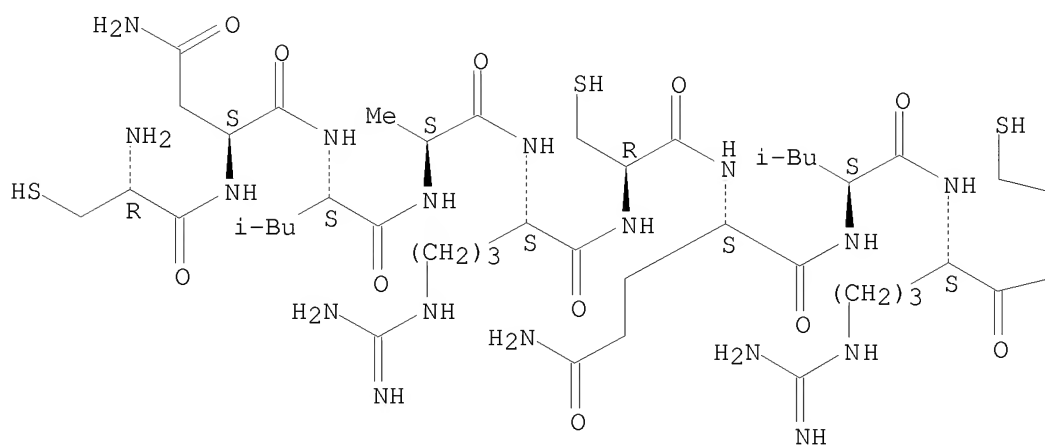
RN 736980-69-1 HCAPLUS
CN L-Cysteinamide, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl- (9CI) (CA INDEX NAME)

NTE modified

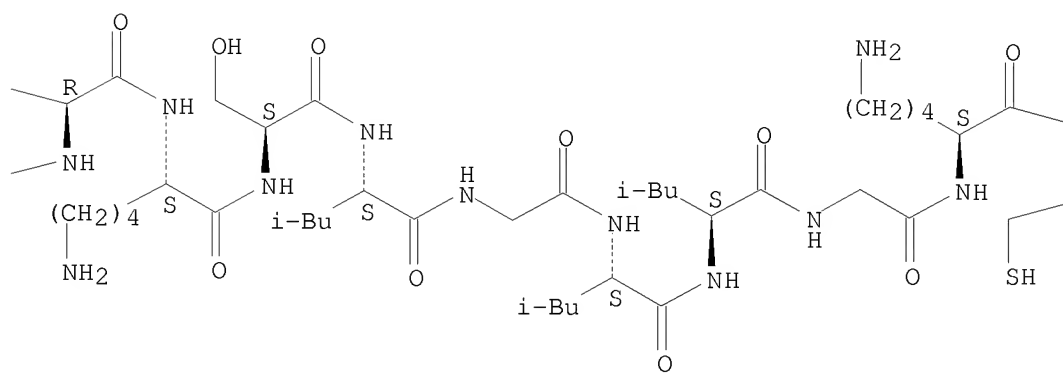
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

Absolute stereochemistry.

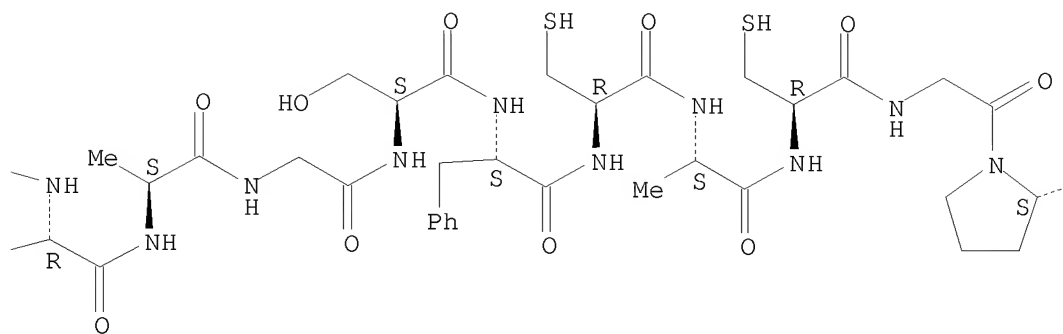
PAGE 1-A

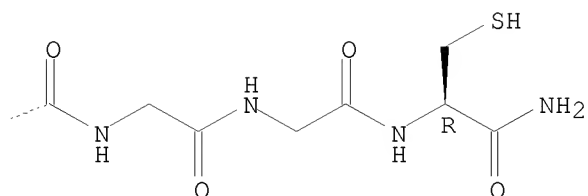


PAGE 1-B



PAGE 1-C





RN 736980-70-4 HCAPLUS

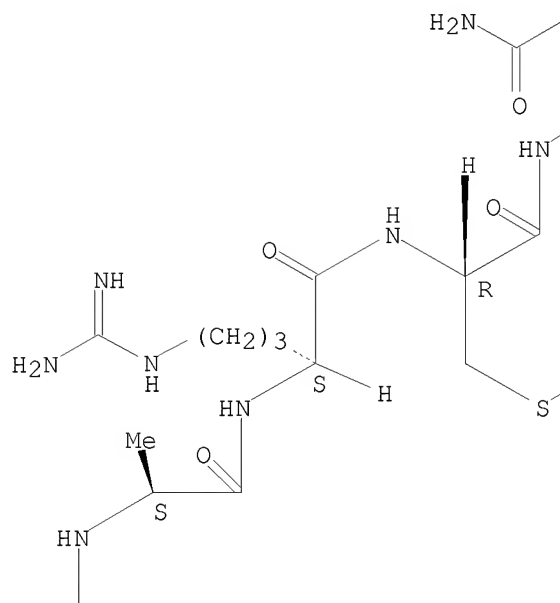
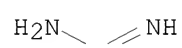
CN L-Cysteinamide, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-, cyclic (1→19), (6→24), (10→26)-tris(disulfide), (31→2')-disulfide with L-γ-glutamyl-L-cysteinylglycine (9CI) (CA INDEX NAME)

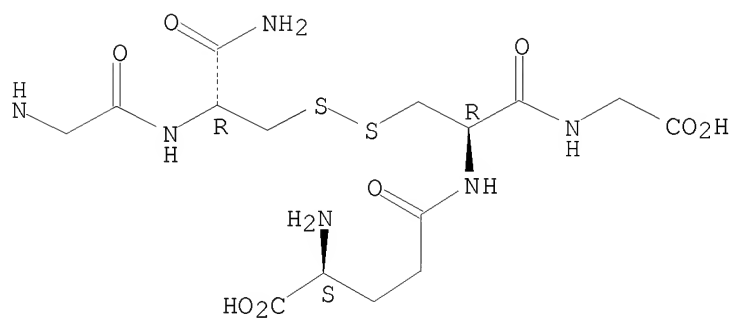
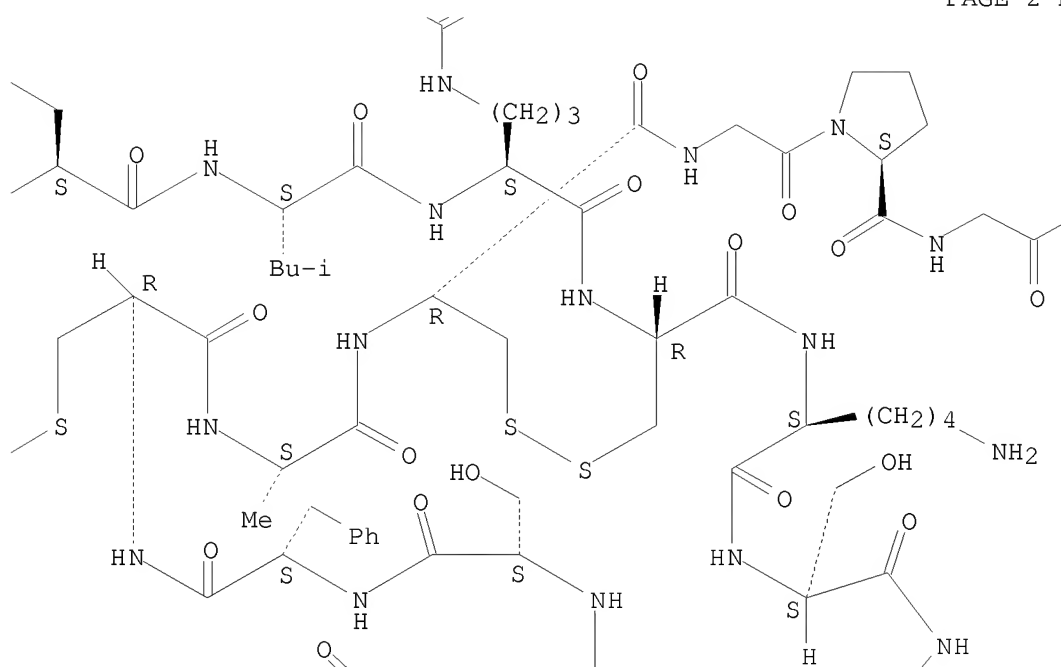
NTE multichain
modified

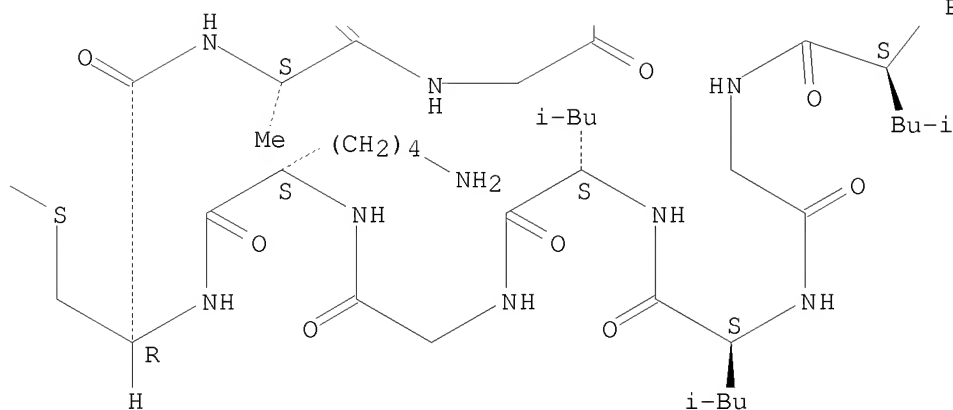
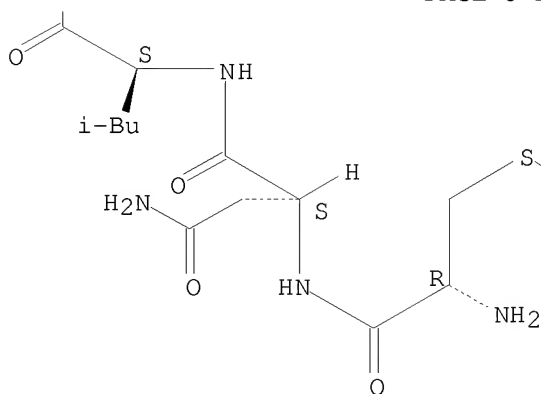
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

1 XCG

Absolute stereochemistry.







L4 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:406955 HCAPLUS

DOCUMENT NUMBER: 143:128623

TITLE: Scorpion-Toxin Mimics of CD4 in Complex with Human Immunodeficiency Virus gp120: Crystal Structures, Molecular Mimicry, and Neutralization Breadth

AUTHOR(S): Huang, Chih-chin; Stricher, Francois; Martin, Loic; Decker, Julie M.; Majeed, Shahzad; Barthe, Philippe; Hendrickson, Wayne A.; Robinson, James; Roumestand, Christian; Sodroski, Joseph; Wyatt, Richard; Shaw, George M.; Vita, Claudio; Kwong, Peter D.

CORPORATE SOURCE: Vaccine Research Center, National Institutes of Health, Bethesda, MD, 20892, USA

SOURCE: Structure (Cambridge, MA, United States) (2005), 13(5), 755-768

CODEN: STRUE6; ISSN: 0969-2126

PUBLISHER: Cell Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Summary: The binding surface on CD4 for the HIV-1 gp120 envelope glycoprotein has been transplanted previously onto a scorpion-toxin scaffold. Here, we use x-ray crystallog. to characterize atomic-level details of gp120 with this transplant, CD4M33. Despite known envelope flexibility, the conformation of gp120 induced by CD4M33 was so similar to

that induced by CD4 that localized measures were required to distinguish ligand-induced differences from lattice variation. To investigate relationships between structure, function, and mimicry, an F23 analog of CD4M33 was devised. Structural and thermodyn. analyses showed F23 to be a better mol. mimic of CD4 than CD4M33. F23 also showed increased neutralization breadth, against diverse isolates of HIV-1, HIV-2, and SIVcpz. Our results lend insight into the stability of the CD4 bound conformation of gp120, define measures that quantify mol. mimicry as a function of evolutionary distance, and suggest how such evaluations might be useful in developing mimetic antagonists with increased neutralization breadth.

IT 491596-19-1D, complex with gp120 858280-93-0D, complex
with gp120
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(scorpion-toxin mimics of CD4 in complex with human immunodeficiency
virus gp120)
RN 491596-19-1 HCAPLUS
CN L-Valinamide, N2-(1-thioxopropyl)-L-asparaginyL-L-leucyl-L-histidyl-L-
phenylalanyl-L-cysteinyl-L-glutaminyL-L-leucyl-L-arginyl-L-cysteinyl-L-
lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-
alanylglycyl-L-seryl-3-[1,1'-biphenyl]-4-yl-L-alanyl-L-cysteinyl-L-alanyl-
L-cysteinyl-, cyclic (5→23), (9→25)-bis(disulfide) (CA INDEX
NAME)

NTE modified

SEQ 1 NLHFCQLRCK SLGLLGKCAG SFCACV

RN 858280-93-0 HCAPLUS
CN L-Valinamide, N2-(1-thioxopropyl)-L-asparaginyL-L-leucyl-L-histidyl-L-
phenylalanyl-L-cysteinyl-L-glutaminyL-L-leucyl-L-arginyl-L-cysteinyl-L-
lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-
alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-,
cyclic (5→23), (9→25)-bis(disulfide) (CA INDEX NAME)

NTE modified

SEQ 1 NLHFCQLRCK SLGLLGKCAG SFCACV

REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:34855 HCAPLUS
DOCUMENT NUMBER: 142:141240
TITLE: Albumin fusion proteins for stabilization of
therapeutic proteins in storage
INVENTOR(S): Haseltine, William A.; Rosen, Craig A.
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., USA
SOURCE: PCT Int. Appl., 884 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 9
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2005003296	A2	20050113	WO 2004-US1369	20040120
WO 2005003296	A3	20050421		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW,			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2513213	A1	20050113	CA 2004-2513213	20040120
EP 1594530	A2	20051116	EP 2004-785757	20040120
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
US 20060014254	A1	20060119	US 2005-175690	20050707
US 20080004206	A1	20080103	US 2006-495624	20060731
US 20080194481	A1	20080814	US 2007-932823	20071031
PRIORITY APPLN. INFO.:			US 2003-441305P	P 20030122
			US 2003-453201P	P 20030311
			US 2003-467222P	P 20030502
			US 2003-472816P	P 20030523
			US 2003-476267P	P 20030606
			US 2003-505172P	P 20030924
			US 2003-506746P	P 20030930
			US 2001-341811P	P 20011221
			US 2002-350358P	P 20020124
			US 2002-351360P	P 20020128
			US 2002-359370P	P 20020226
			US 2002-360000P	P 20020228
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			US 2002-370227P	P 20020408
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			US 2002-382617P	P 20020524
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			US 2002-385708P	P 20020605
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			US 2002-402131P	P 20020809
			US 2002-402708P	P 20020813
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			US 2002-420246P	P 20021023
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			WO 2002-US40891	A1 20021223
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			US 2004-775204	A1 20040211
			US 2004-549901P	P 20040305
			US 2004-556906P	P 20040329
			US 2004-636603P	P 20041217
			WO 2005-US4041	A2 20050209
			US 2005-175690	A2 20050707
			US 2005-707521P	P 20050812
			US 2005-712386P	P 20050831
			US 2005-732724P	P 20051103
			US 2006-776914P	P 20060228
			US 2006-781361P	P 20060313
			US 2006-429276	A2 20060508

US 2006-810182P P 20060602
US 2006-813682P P 20060615
US 2006-495624 A2 20060731

AB Fusion proteins of human serum albumin and therapeutic proteins are described. The fusion of the therapeutic protein to the serum albumin is used to stabilize the therapeutic protein in storage. The fusion proteins may be manufactured by expression of the corresponding chimeric gene in a suitable host.

IT 823865-03-8
RL: PRP (Properties)
(unclaimed protein sequence; albumin fusion proteins for stabilization of therapeutic proteins in storage)

RN 823865-03-8 HCAPLUS

CN Peptide, (Xaa-Asn-Leu-His-Phe-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLHFCQLRC KSLGLLGKCA GSXCACV

L4 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:857331 HCAPLUS

DOCUMENT NUMBER: 141:346124

TITLE: Covalent attachment of ligands to nucleophilic proteins guided by non-covalent binding and applications for diagnosis, therapy, immunoassays and purification of recombinant proteins

INVENTOR(S): Paul, Sudhir; Nishiyama, Yasuhiro

PATENT ASSIGNEE(S): The University of Texas, USA

SOURCE: PCT Int. Appl., 144 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004087059	A2	20041014	WO 2004-US9399	20040326
WO 2004087059	A3	20050721		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2520392	A1	20041014	CA 2004-2520392	20040326
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EP 1610808	A2	20060104	EP 2004-758449	20040326
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK

JP 2007527373	T	20070927	JP 2006-509376	20040326
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US 20070179083	A1	20070802	US 2006-581296	20060601
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PRIORITY APPLN. INFO.:	US 2003-457293P	P	20030326
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WO 2004-US9399	W	20040326
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AB A covalently reactive ligand analog (CAL) of formula [L1...Lx(L'-Y"-Y'-'

Y)...Lm]n: wherein, L1...Lx...Lm are components defining a ligand determinant, LX is a component unit of the ligand determinant selected from the group consisting of an amino acid residue, sugar residue, a fatty acid residue and a nucleotide, L' is a functional group of LX, Y' is atom, covalent bond or linker, Y' is an optional charged or neutral group Y is a covalently reactive electrophilic group that reacts specifically with a receptor that binds to said ligand determinant, and n is an integer from 1 to 1000 m is an integer from 1 to 30.

IT 775343-06-1P 776319-85-8P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);

BIOL (Biological study); PREP (Preparation)

(peptidyl CD4-CAL; covalent attachment of ligands to nucleophilic proteins guided by non-covalent binding and applications for diagnosis, therapy and immunoassays)

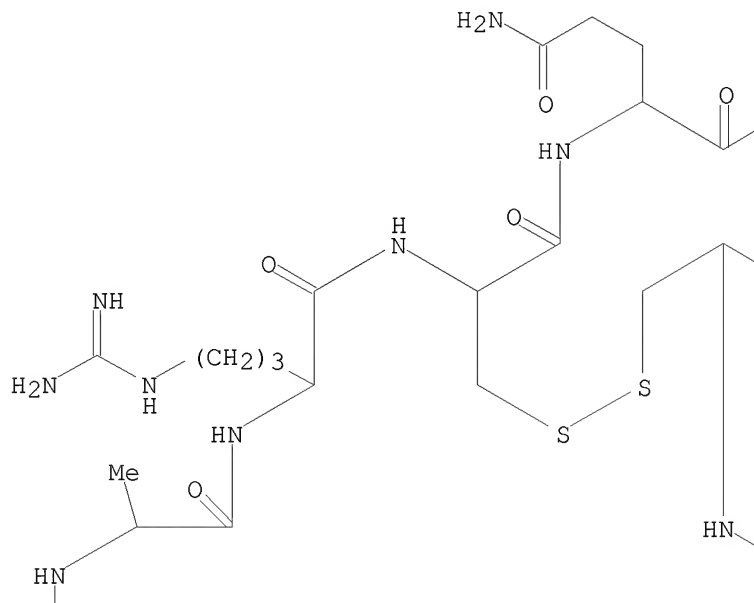
RN 775343-06-1 HCAPLUS

CN L-Prolinamide, L-cysteinyll-L-asparaginyll-L-leucyl-L-alanyl-L-arginyl-L-cysteinyll-L-glutaminyll-L-leucyl-L-arginyl-L-cysteinyll-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyll-L-alanyllglycyl-L-seryl-L-phenylalanyl-L-cysteinyll-L-alanyl-L-cysteinyllglycyl-N-[[4-(aminoiminomethyl)phenyl](diphenoxyphosphinyl)methyl]-, cyclic (1→19), (6→24), (10→26)-tris(disulfide) (9CI) (CA INDEX NAME)

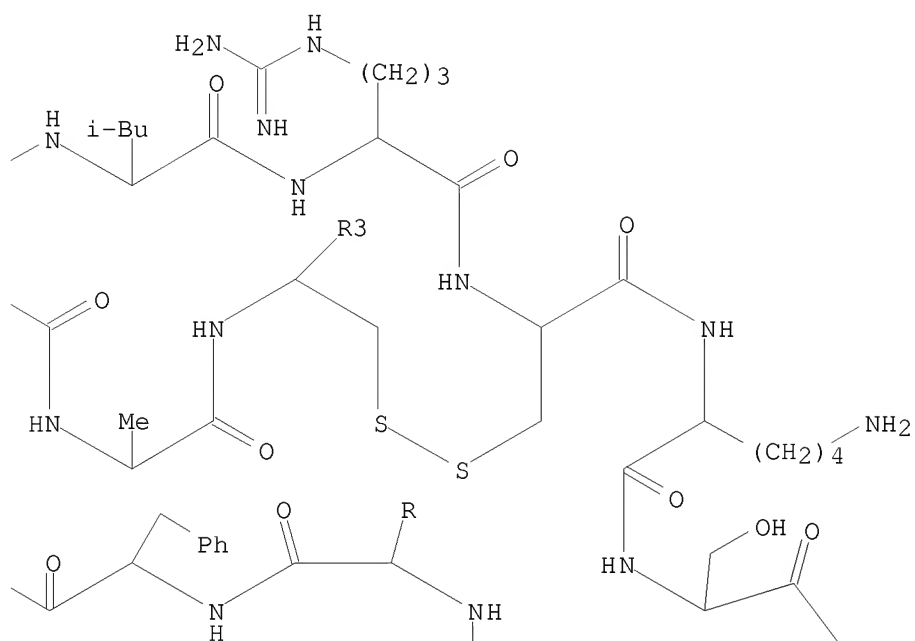
NTE modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

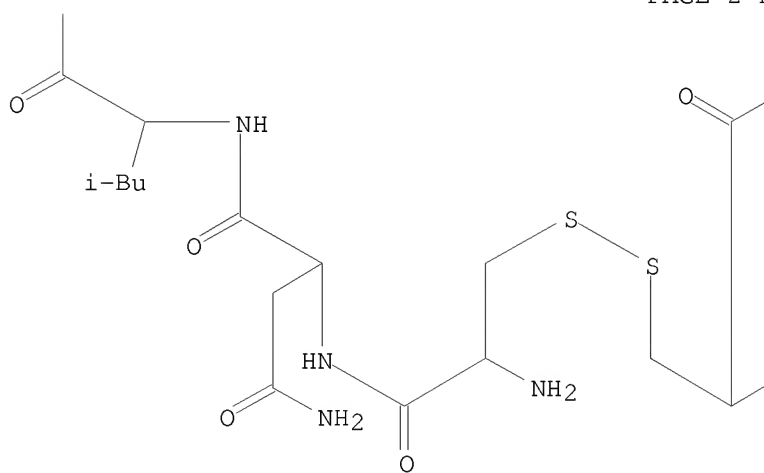
PAGE 1-B



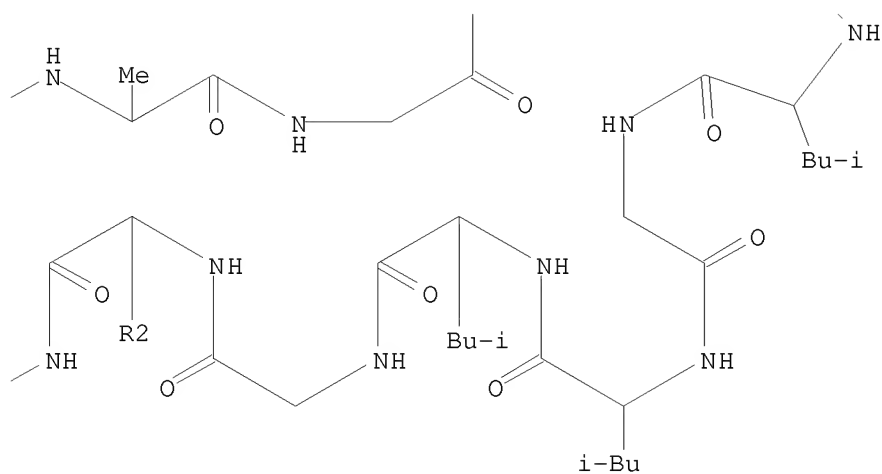
PAGE 1-C



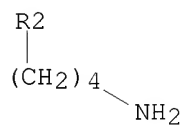
PAGE 2-B



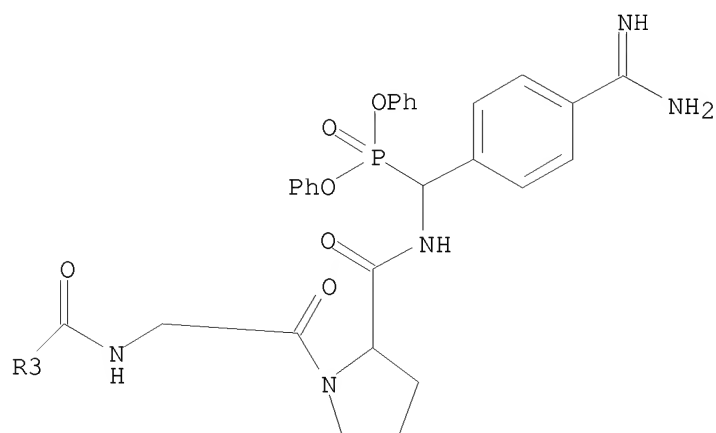
PAGE 2-C



PAGE 3-A



PAGE 4-A



RN 776319-85-8 HCAPLUS
 CN L-Prolinamide, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-N6-[8-[[[4-(aminoiminomethyl)phenyl](diphenoxyphosphinyl)methyl]amino]-1,8-

dioxooctyl]-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-N6-[8-
[[[4-(aminoiminomethyl)phenyl](diphenoxyphosphinyl)methyl]amino]-1,8-
dioxooctyl]-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-
cysteinyl-L-alanyl-L-cysteinylglycyl-, cyclic
(1→19), (6→24), (10→26)-tris(disulfide) (9CI) (CA
INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

L4 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:481896 HCAPLUS

DOCUMENT NUMBER: 141:191065

TITLE: Synthetic Bivalent CD4-Mimetic Miniproteins Show
Enhanced Anti-HIV Activity over the Monovalent
Miniprotein

AUTHOR(S): Li, Hengguang; Song, Haijing; Heredia, Alonso; Le,
Nhut; Redfield, Robert; Lewis, George K.; Wang, Lai-Xi

CORPORATE SOURCE: Institute of Human Virology, University of Maryland
Biotechnology Institute, University of Maryland,
Baltimore, MD, 21201, USA

SOURCE: Bioconjugate Chemistry (2004), 15(4), 783-789
CODEN: BCCHES; ISSN: 1043-1802

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 141:191065

AB HIV-1 envelope glycoprotein gp120 is displayed as a trimeric complex on
the surface of virion and infected T-cells, making it a typical
multivalent target. This paper describes the design and synthesis of
bivalent CD4-mimetic miniproteins to target the conserved CD4-binding
pockets in the trimeric gp120. Using miniprotein CD4M9 as the model
inhibitor, the authors created bivalent inhibitors in which two CD4M9
moieties were tethered by a spacer of varied length and evaluated the
anti-HIV activity of the compds. using a cell culture assay. The
synthetic bivalent miniproteins showed 5-21-fold enhancement in anti-HIV
activity over the monovalent miniprotein. The activity enhancement is
dependent on the length of the spacer. This study suggests that targeting
the oligomeric gp120 complex by novel multivalent ligands offers a
valuable strategy for developing highly specific and effective HIV entry
inhibitors.

IT 736980-71-5P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant
or reagent)

(preparation and anti-HIV activity of bivalent CD4-mimetic miniproteins
designed to target CD4-binding pockets in HIV envelope glycoprotein
gp120)

RN 736980-71-5 HCAPLUS

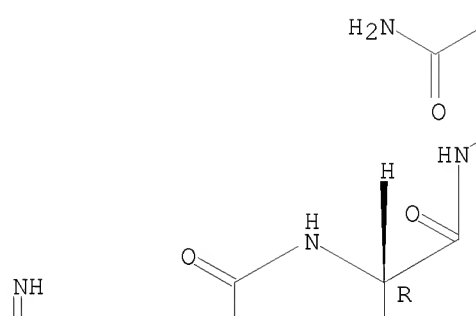
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cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-
leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-
seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-
prolylglycylglycyl-, cyclic (1→19), (6→24), (10→26)-
tris(disulfide) (CA INDEX NAME)

NTE modified

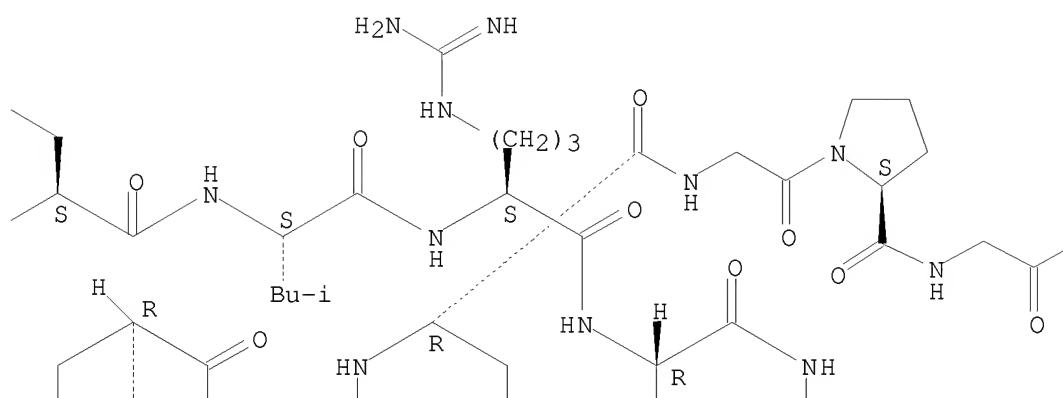
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

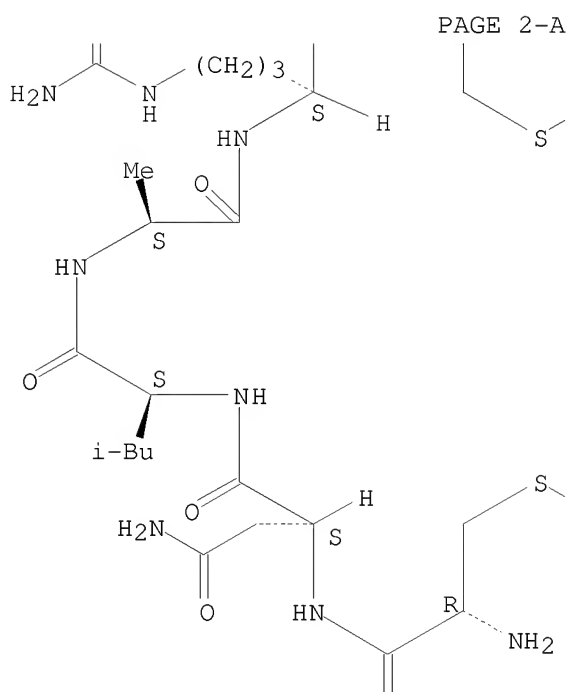
Absolute stereochemistry.

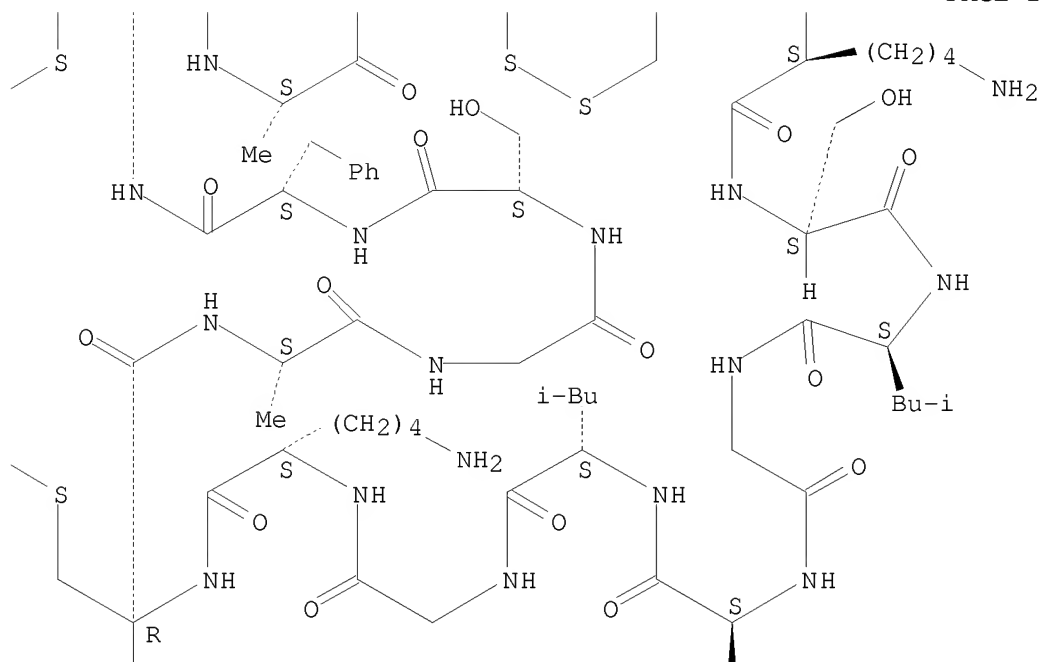
PAGE 1-A



PAGE 1-B







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IT 737755-77-0P 737755-78-1P 737755-79-2P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL
 (Biological study); PREP (Preparation)
 (preparation and anti-HIV activity of bivalent CD4-mimetic miniproteins
 designed to target CD4-binding pockets in HIV envelope glycoprotein
 gp120)

RN 737755-77-0 HCAPLUS
 CN L-Cysteinamide, 31S,31'S-[oxybis[2,1-ethanedioxy-2,1-ethanediyl(2,5-
 dioxo-1,3-pyrrolidinediyl)]]bis[L-cysteinyl-L-asparaginyl-L-leucyl-L-
 alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-
 lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-
 alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-
 L-prolylglycylglycyl-, cyclic (1→19), (1'→19'), (6→24),
 (6'→24'), (10→26), (10'→26')-hexakis(disulfide) (9CI)
 (CA INDEX NAME)

NTE multichain
 modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C
 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

RN 737755-78-1 HCAPLUS
CN L-Cysteinamide, 31S,31'S-[(6,17-dioxo-10,13-dioxo-7,16-diazadocosane-1,22-diyl)bis(2,5-dioxo-1,3-pyrrolidinediyl)]bis[L-cysteiny-L-asparaginy-L-leucyl-L-alanyl-L-arginyl-L-cysteiny-L-glutaminyl-L-leucyl-L-arginyl-L-cysteiny-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteiny-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteiny-L-alanyl-L-cysteinyglycyl-L-prolylglycylglycyl-, cyclic (1→19), (1'→19'), (6→24), (6'→24'), (10→26), (10'→26')-hexakis(disulfide) (9CI) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

RN 737755-79-2 HCAPLUS
CN L-Cysteinamide, 31S,31'S-[(1,8,19,26-tetraoxo-12,15-dioxo-2,9,18,25-tetraazahexacosane-1,26-diyl)bis[4,1-cyclohexanediylmethylen(2,5-dioxo-1,3-pyrrolidinediyl)]]bis[L-cysteiny-L-asparaginy-L-leucyl-L-alanyl-L-arginyl-L-cysteiny-L-glutaminyl-L-leucyl-L-arginyl-L-cysteiny-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteiny-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteiny-L-alanyl-L-cysteinyglycyl-L-prolylglycylglycyl-, cyclic (1→19), (1'→19'), (6→24), (6'→24'), (10→26), (10'→26')-hexakis(disulfide) (9CI) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

IT 736980-69-1P 736980-70-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and anti-HIV activity of bivalent CD4-mimetic miniproteins designed to target CD4-binding pockets in HIV envelope glycoprotein gp120)

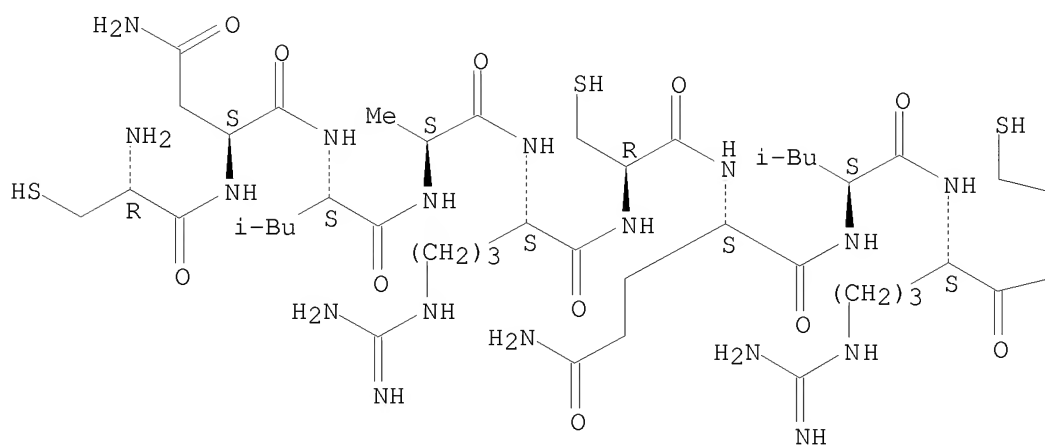
RN 736980-69-1 HCAPLUS
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NTE modified

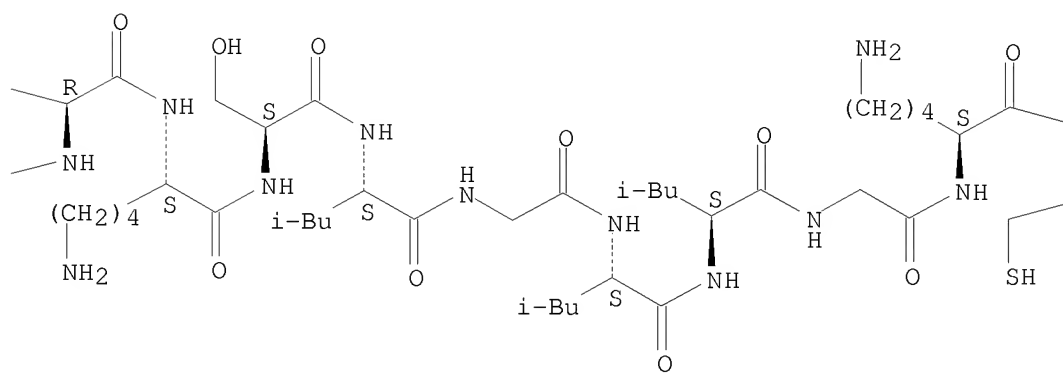
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Absolute stereochemistry.

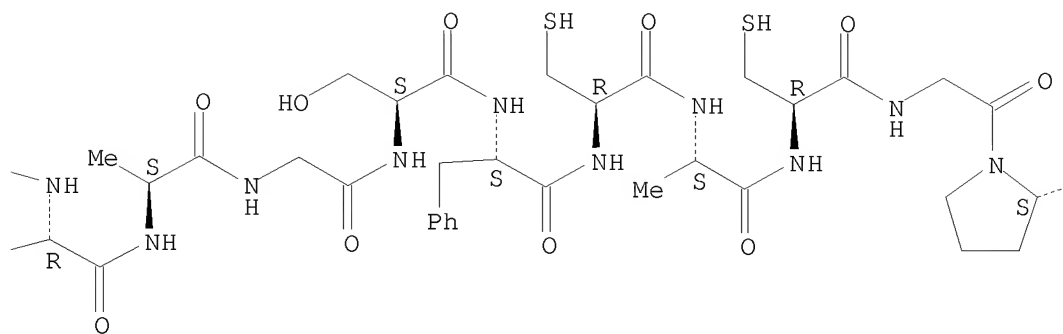
PAGE 1-A

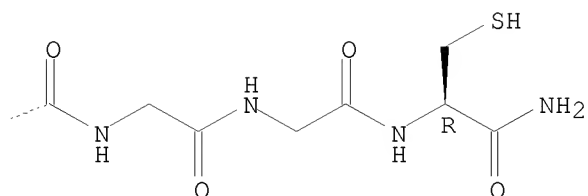


PAGE 1-B



PAGE 1-C





RN 736980-70-4 HCAPLUS

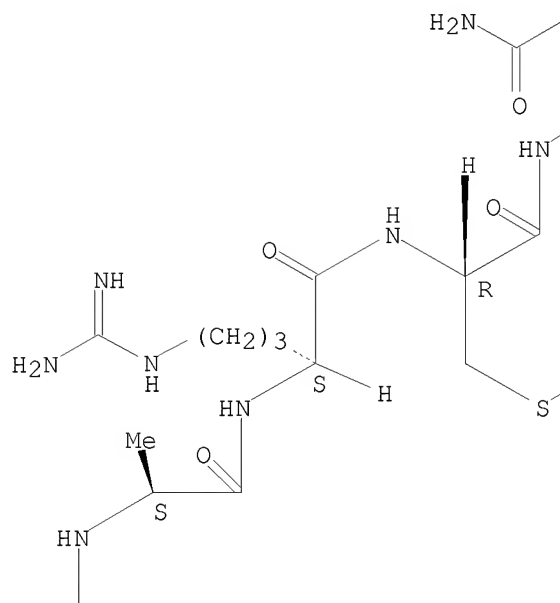
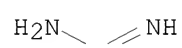
CN L-Cysteinamide, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-, cyclic (1→19), (6→24), (10→26)-tris(disulfide), (31→2')-disulfide with L-γ-glutamyl-L-cysteinylglycine (9CI) (CA INDEX NAME)

NTE multichain
modified

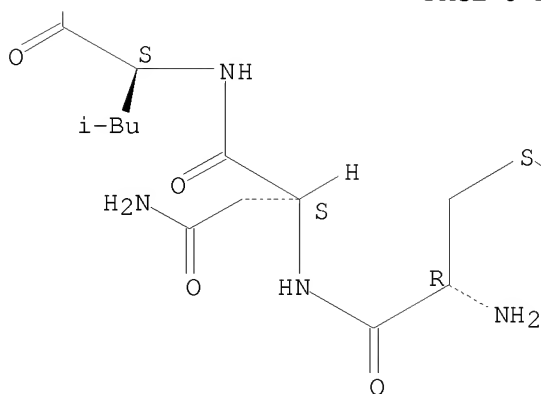
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGPGG C

1 XCG

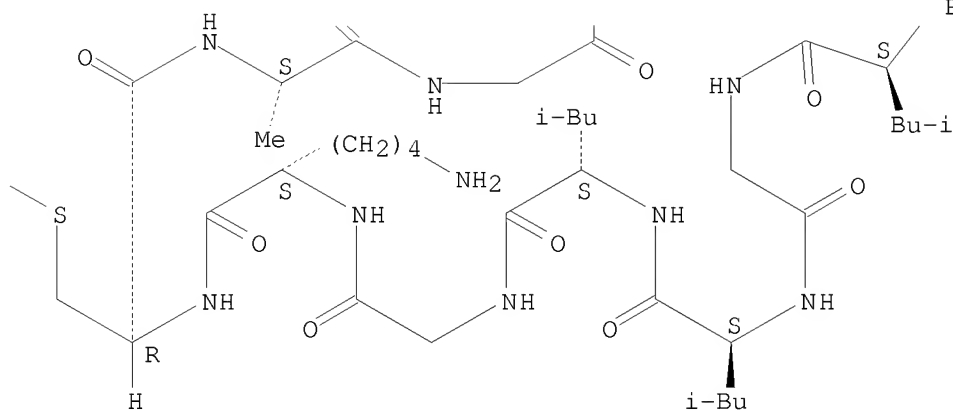
Absolute stereochemistry.



PAGE 3-A



PAGE 3-B



IT 736980-68-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of spacers for incorporation into bivalent CD4-mimetic miniproteins)

RN 736980-68-0 HCAPLUS

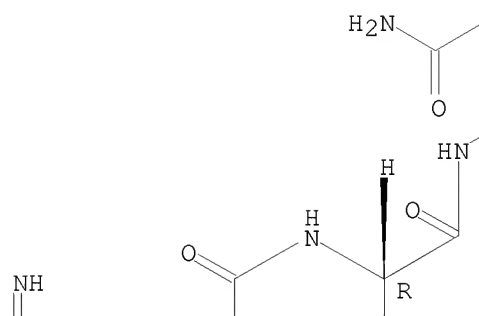
CN L-Cysteinamide, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-L-prolylglycylglycyl-S-(2-amino-2-oxoethyl)-, cyclic (1→19), (6→24), (10→26)-tris(disulfide) (9CI) (CA INDEX NAME)

NTE modified

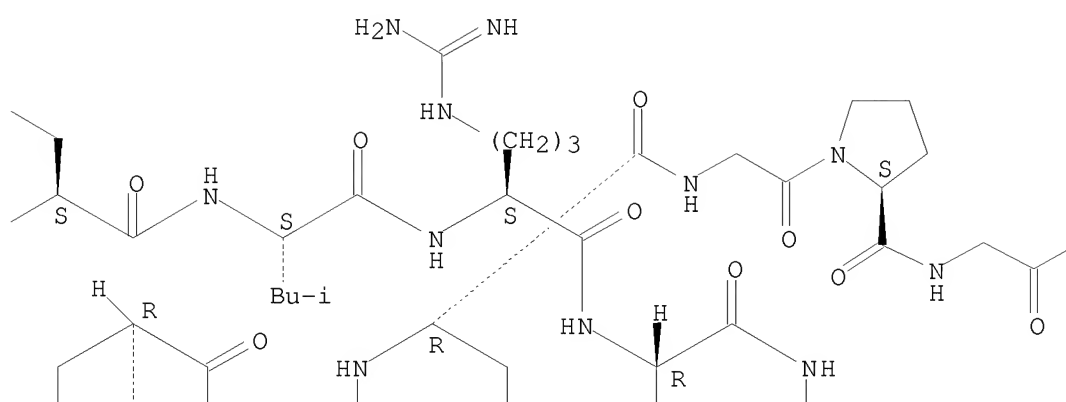
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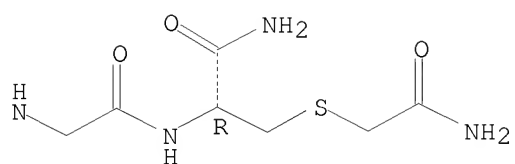
Absolute stereochemistry.

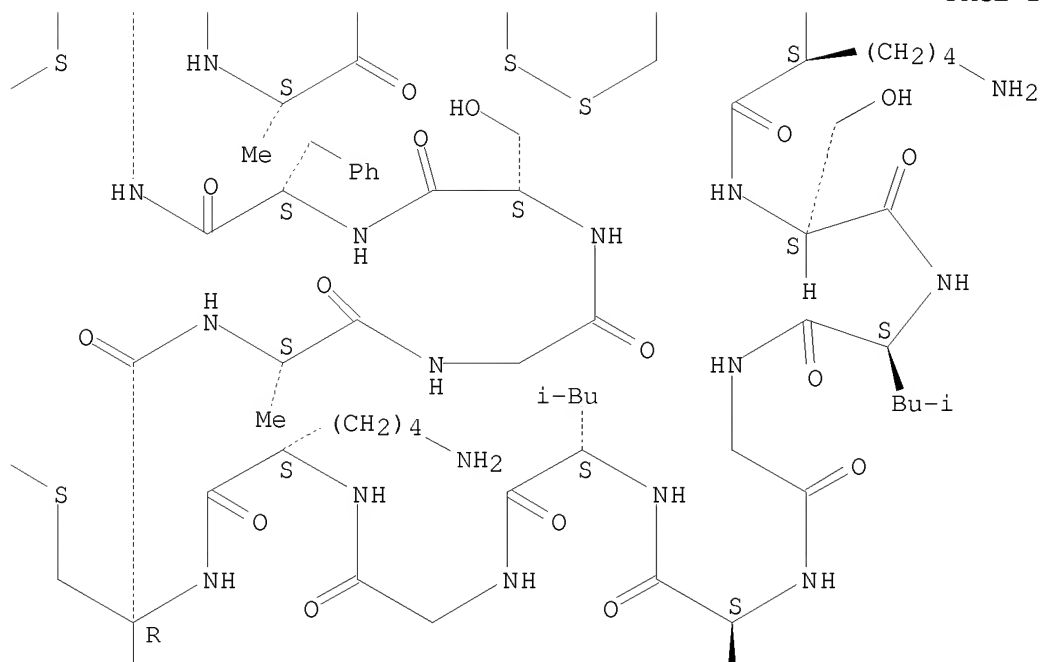
PAGE 1-A



PAGE 1-B







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REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2004:370950 HCAPLUS
 DOCUMENT NUMBER: 140:390285
 TITLE: HIV envelope-CD4 complexes and hybrids for diagnosis, treatment and prevention HIV infection
 INVENTOR(S): Barnett, Susan W.; Srivastava, Indresh
 PATENT ASSIGNEE(S): Chiron Corporation, USA
 SOURCE: PCT Int. Appl., 71 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004037847	A2	20040506	WO 2003-US14575	20030507
WO 2004037847	A3	20040923		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2482744	A1	20040506	CA 2003-2482744	20030507
AU 2003301556	A1	20040513	AU 2003-301556	20030507
EP 1553976	A2	20050720	EP 2003-808365	20030507

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

BR 2003008896	A	20070109	BR 2003-8896	20030507
IN 2004KN01412	A	20060224	IN 2004-KN1412	20040923
ZA 2004008595	A	20060927	ZA 2004-8595	20041022
MX 2004PA10919	A	20050125	MX 2004-PA10919	20041103
US 20060073576	A1	20060406	US 2005-514055	20050829
IN 2007KN02450	A	20080801	IN 2007-KN2450	20070702

PRIORITY APPLN. INFO.:

	US 2002-378543P	P	20020507
	US 2003-459314P	P	20030331
	WO 2003-US14575	W	20030507
	IN 2004-KN1412	A3	20040923

AB Env-CD4 complexes and hybrids are disclosed that expose cryptic epitopes that are important in virus neutralization. The HIV env protein is gp140env, gp120env or derivative; and the CD4 antigen is a soluble polypeptide of

CD4. The HIV env protein peptide-soluble CD4 complexes or hybrids are useful as diagnostics or vaccines. Methods of diagnosis, treatment and prevention using the polynucleotides and polypeptides are also provided.

IT 326494-27-3DP, mutated and chimeric derivs. with HIV env
685876-61-3DP, mutated and chimeric derivs. with HIV env

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(HIV envelope-CD4 complexes and hybrids for diagnosis, treatment and prevention HIV infection)

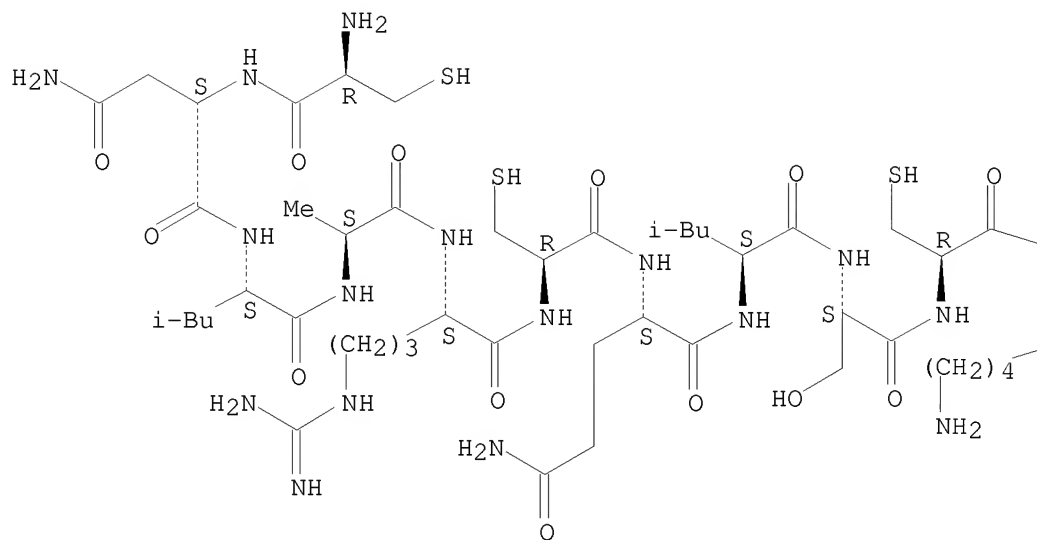
RN 326494-27-3 HCAPLUS

CN Glycine, L-cysteiny-L-asparaginy-L-leucyl-L-alanyl-L-arginyl-L-cysteiny-L-glutaminyl-L-leucyl-L-seryl-L-cysteiny-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-lysylglycylglycyl-L-cysteiny-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteiny-L-alanyl-L-cysteiny- (9CI) (CA INDEX NAME)

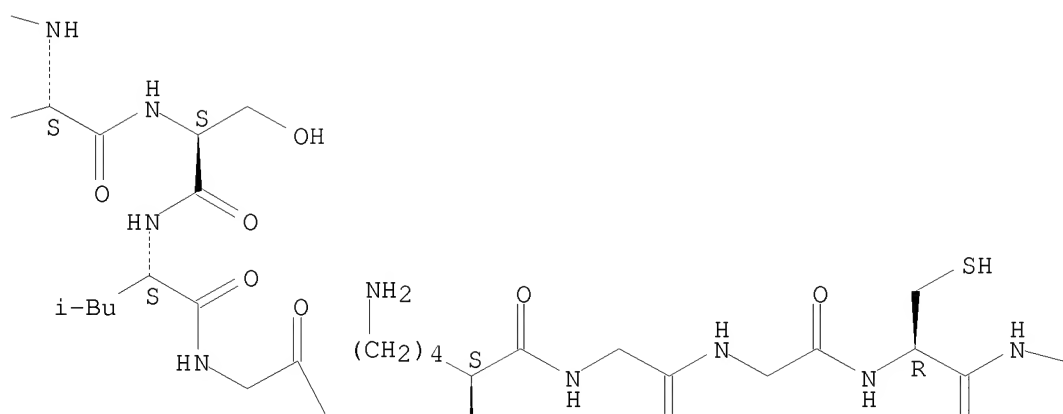
SEQ 1 CNLARCQLSC KSLGLKGGCA GSFCACG

Absolute stereochemistry.

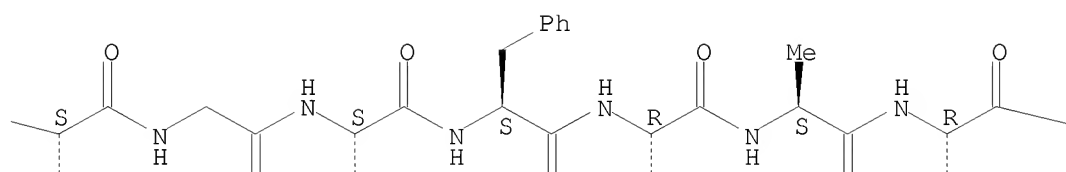
PAGE 1-A



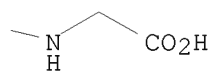
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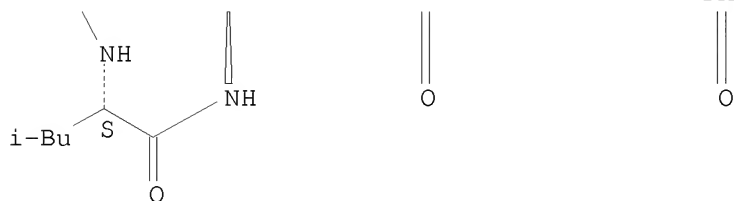
PAGE 1-C



PAGE 1-D



PAGE 2-B



PAGE 2-C

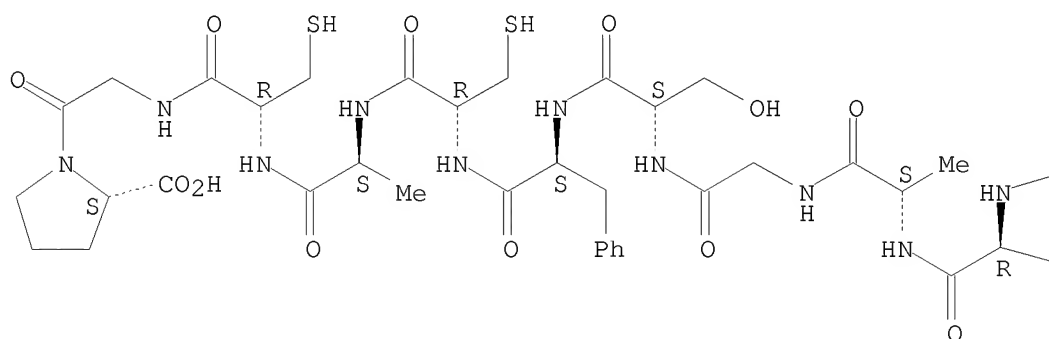


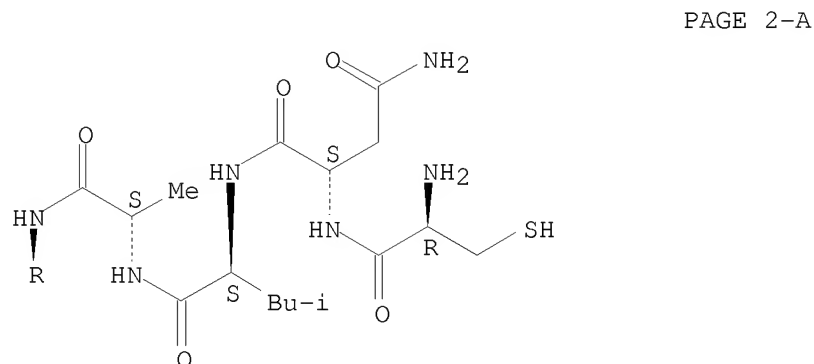
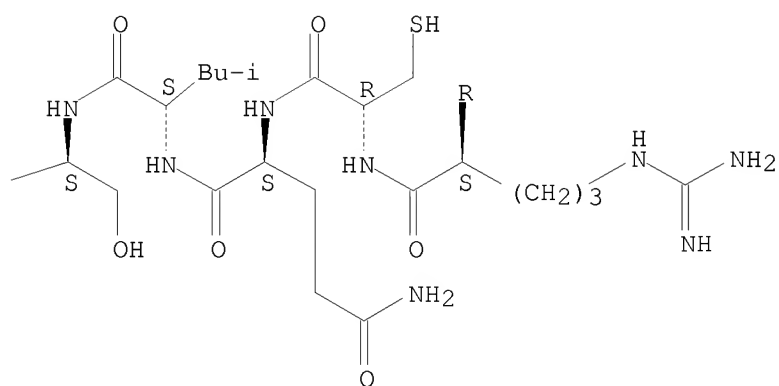
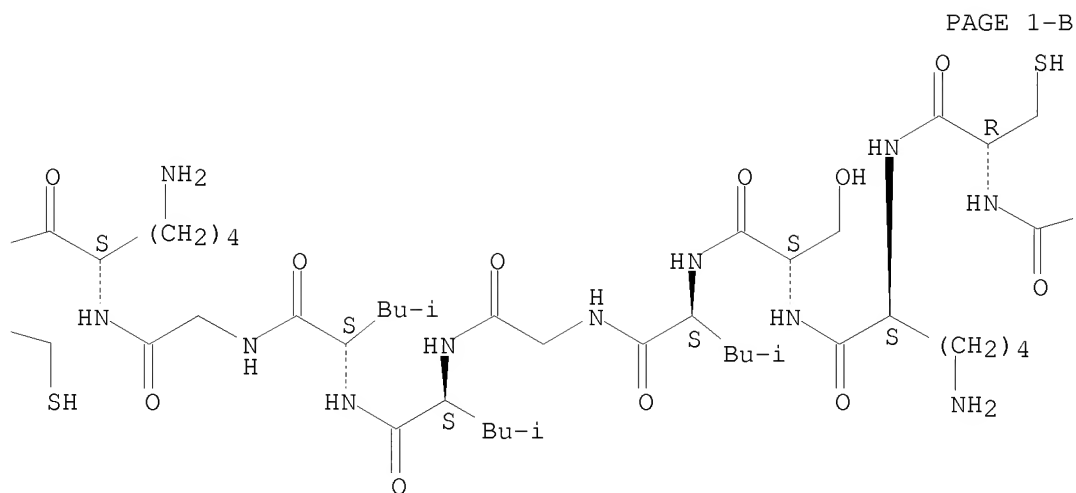
RN 685876-61-3 HCAPLUS
 CN L-Proline, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-seryl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl- (9CI) (CA INDEX NAME)

SEQ 1 CNLARCQLSC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

PAGE 1-A





L4 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:28612 HCAPLUS

DOCUMENT NUMBER: 141:37333

TITLE: Design of CD4 miniprotein, powerful inhibitor of HIV-1 infection and potential component of an AIDS vaccine

AUTHOR(S): Martin, Loic; Stricher, Francois; Freulon, Isabelle; Menez, Andre; Barthe, Philippe; Roumestand, Christian; Veas, Francisco; Lusso, Paolo; Vita, Claudio

CORPORATE SOURCE: Department of Protein Engineering and Research, CEA Saclay, Gif-sur-Yvette, 91191, Fr.

SOURCE: Peptides 2002, Proceedings of the European Peptide Symposium, 27th, Sorrento, Italy, Aug. 31-Sept. 6, 2002 (2002), 652-653. Editor(s): Benedetti, Ettore; Pedone, Carlo. Edizioni Ziino: Castellammare di Stabia, Italy. CODEN: 69EYXG; ISBN: 88-900948-1-8

DOCUMENT TYPE: Conference

LANGUAGE: English

AB A CD4 miniprotein (27 amino acids long) was designed that mimics the core of the CD4 site interacting with gp120 and displays a native-like affinity in gp120 binding, nanomolar antiviral potency and effective exposure of cryptic conserved gp120 epitopes to neutralizing antibodies. The functional β -hairpin 35-46 of CD4 was selected for reproduction, since this region is central in gp120 binding. Then, a small scorpion toxin, scyllatoxin, presenting a structurally similar β -hairpin was selected as host scaffold and eight solvent-exposed residues of the CD4 β -hairpin were introduced at homologous positions in the host mini-protein scaffold. Finally, a potent mini-CD4 with bona fide CD4-like properties was designed by optimizing the miniprotein interactions with the gp120 protein of the exterior HIV-1 envelope. The optimized CD4M33 miniprotein, by binding with high affinity to the CD4 binding site of the HIV-1 envelope glycoprotein, potentially inhibits infection by a broad range of HIV-1 isolates, including primary CCR5-tropic and dual-tropic patient isolates that are generally resistant to inhibition by soluble CD4.

IT 491596-19-1
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(design of CD4 miniprotein as inhibitor of HIV-1 infection and potential component of an AIDS vaccine)

RN 491596-19-1 HCAPLUS

CN L-Valinamide, N2-(1-thioxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanyl-glycyl-L-seryl-3-[1,1'-biphenyl]-4-yl-L-alanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (5→23), (9→25)-bis(disulfide) (CA INDEX NAME)

NTE modified

SEQ 1 NLHFCQLRCK SLGLLGKCAGSFCACV

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:837582 HCAPLUS

DOCUMENT NUMBER: 139:328383

TITLE: Anti-HIV composition, process of manufacture, and peptide drug

INVENTOR(S): Vives, Romain; Sattentau, Quentin; Vita, Claudio; Lortat, Jacob Hugues

PATENT ASSIGNEE(S): Commissariat a l'Energie Atomique, Fr.; Centre National de la Recherche Scientifique CNRS

SOURCE: Fr. Demande, 56 pp. CODEN: FRXXBL

DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2838649	A1	20031024	FR 2002-4926	20020419
FR 2838649	B1	20060113		
CA 2481325	A1	20031030	CA 2003-2481325	20030417
WO 2003089000	A2	20031030	WO 2003-FR1234	20030417
WO 2003089000	A3	20040408		
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003246840	A1	20031103	AU 2003-246840	20030417
EP 1496932	A2	20050119	EP 2003-746844	20030417
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JP 2005528405	T	20050922	JP 2003-585751	20030417
US 20060084593	A1	20060420	US 2004-509686	20041012
PRIORITY APPLN. INFO.:			FR 2002-4926	A 20020419
			WO 2003-FR1234	W 20030417

OTHER SOURCE(S): MARPAT 139:328383

AB The present invention refers to an anti-HIV composition and its process of fabrication. The composition of this invention includes a polyanion and a mol. able to induce exposure of the epitope CD4i of the viral protein gp120. The polyanion can be for example heparin, heparan sulfate, and a polyanion equivalent to heparin or the heparan sulfate. The mol. able to induce the exposure of the epitope CD4i of viral protein gp120 is peptide CD4 or a derivative of this one. The present invention also refers to the use of the aforementioned composition for the manufacture of a drug, in particular of a

drug intended for the treatment of AIDS.

IT 326494-28-4 613958-82-0 613958-83-1
 613958-84-2 613958-85-3 613958-86-4
 613958-87-5 613958-88-6 613958-90-0
 613958-91-1 613958-93-3 613958-94-4

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(anti-HIV composition inducing exposure of gp120 epitope CD4i)

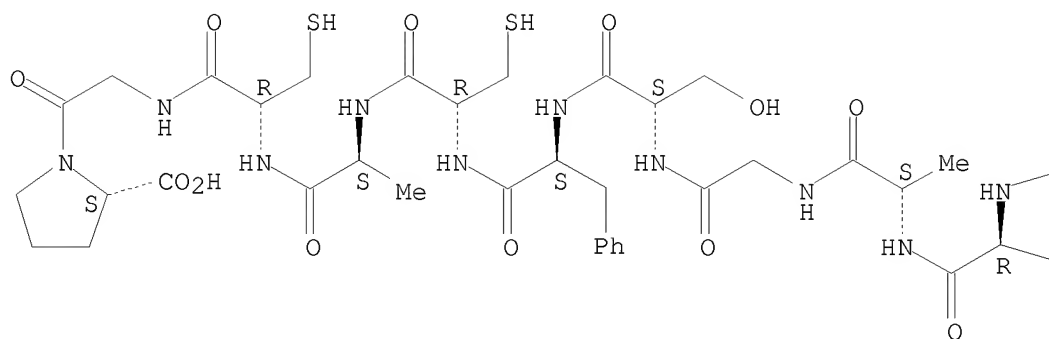
RN 326494-28-4 HCAPLUS

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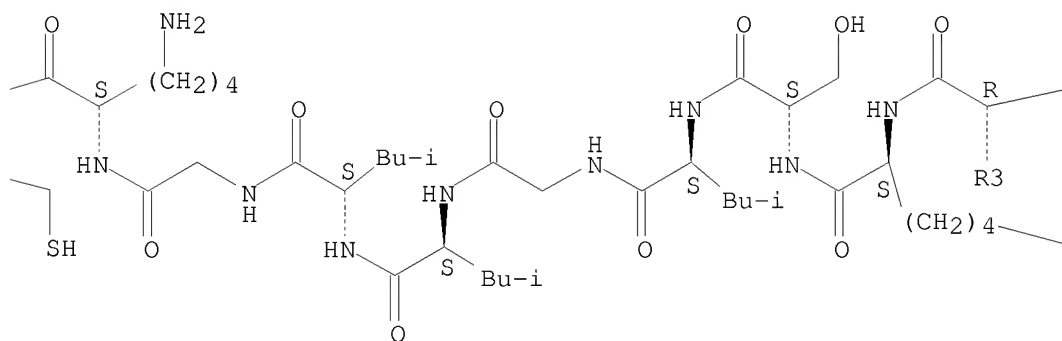
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Absolute stereochemistry.

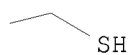
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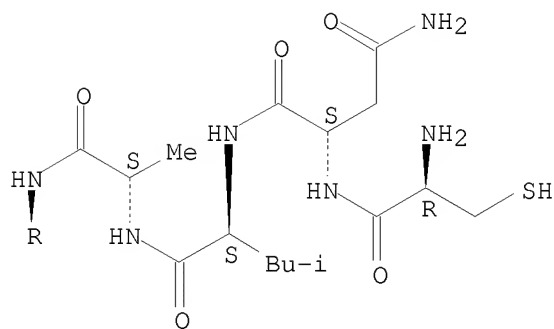
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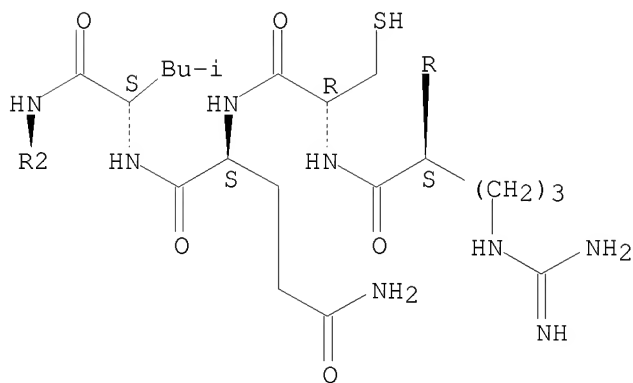
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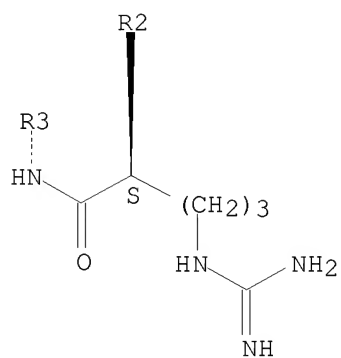
PAGE 2-A



PAGE 3-A



PAGE 4-A



RN 613958-82-0 HCAPLUS
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SEQ 1 XNLCRCQLRC KSLGGLGKCA GSFCACGP

RN 613958-83-1 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-His-Phe-Cys-Val-Gln-Arg-Cys-His-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLHFCVQRC HSLGLLGKCA GSXCACV

RN 613958-84-2 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-Ala-Phe-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Phe-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNL AFCQLRC KSLGLLGKCA GSFCACV

RN 613958-85-3 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-Ala-Phe-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Ser-Ser-Phe-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNL AFCQLRC KSLGLLGKCA SSFCACV

RN 613958-86-4 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-Ala-Phe-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-His-Phe-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNL AFCQLRC KSLGLLGKCA GHFCACV

RN 613958-87-5 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-Ala-Phe-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Asn-Phe-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNL AFCQLRC KSLGLLGKCA GNFCACV

RN 613958-88-6 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-Gln-Phe-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLQFCQLRC KSLGLLGKCA GSXCACV

RN 613958-90-0 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-Ala-Arg-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLARCQLRC KSLGLLGKCA GSXCACV

RN 613958-91-1 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-His-Phe-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLHFCQLRC KSLGLLGKCA GSXCACV

RN 613958-93-3 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-His-Phe-Cys-Val-Gln-Arg-Cys-His-Ser-Leu-Gly-Lys-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Phe-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLHFCVQRC HSLGKLGKCA GSFCACV

RN 613958-94-4 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-His-Phe-Cys-Val-Gln-Arg-Cys-His-Ser-Leu-Gly-Leu-Lys-Gly-Lys-Cys-Ala-Gly-Ser-Phe-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLHFCVQRC HSLGLKGKCA GSFCACV

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:509578 HCAPLUS

DOCUMENT NUMBER: 140:161981

TITLE: Rational engineering of a CD4 mini-protein exhibiting
native-like affinity for Gp120 and inhibiting HIV-1
entry

AUTHOR(S): Vita, Claudio; Martin, Loic; Freulon, Isabelle;
Stricher, Francois; Combes, Olivier; Menez, Andre;
Barthe, Philippe; Roumestand, Christian; Misse,
Dorothee; Veas, Francisco; Clayette, Pascal; Dormont,
Dominique

CORPORATE SOURCE: Departement d'Ingenierie et d'Etudes des Proteines,
CEA Saclay, Gif-sur-Yvette, 91190, Fr.

SOURCE: Peptides 2000, Proceedings of the European Peptide
Symposium, 26th, Montpellier, France, Sept. 10-15,
2000 (2001), Meeting Date 2000, 443-444. Editor(s):
Martinez, Jean; Fehrentz, Jean-Alain. Editions EDK:
Paris, Fr.

CODEN: 69EDWK; ISBN: 2-84254-048-4

DOCUMENT TYPE: Conference

LANGUAGE: English

AB Using a small scorpion toxin as structural scaffold, the authors designed
a mini-protein to mimic the core of the CD4 protein surface interacting
with gp120-CD4 and to inhibit HIV-1 entry. It is a 27 amino acid
mini-protein containing 8 solvent-exposed residues of the CD4 β -hairpin
35-46, central in gp120 binding, at homologous positions of the
structurally similar β -hairpin of the scorpion toxin. Three
dimensional NMR anal. revealed that CD4M9 has a close structural
similarity between the backbone and side-chains conformation of its
putative binding site and that of CD4. CD4M9 inhibited gp120-CD4
interaction with 400 nM IC50 and, most importantly, prevented HIV-1

infection of T lymphocytes at 3.0 µg/mL. Thus, stable natural mini-proteins can act as structural scaffolds to reproduce the core of protein-protein interaction surfaces, allowing further refinement of the introduced binding affinity by recursive cycles of structure-function anal.

IT 326494-28-4

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(engineering of CD4 mini-protein exhibiting native-like affinity for gp120env and inhibiting HIV-1 entry into T cells)

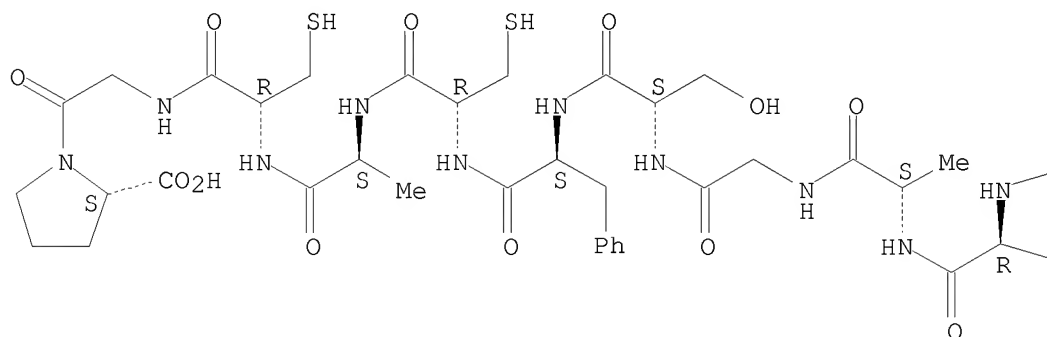
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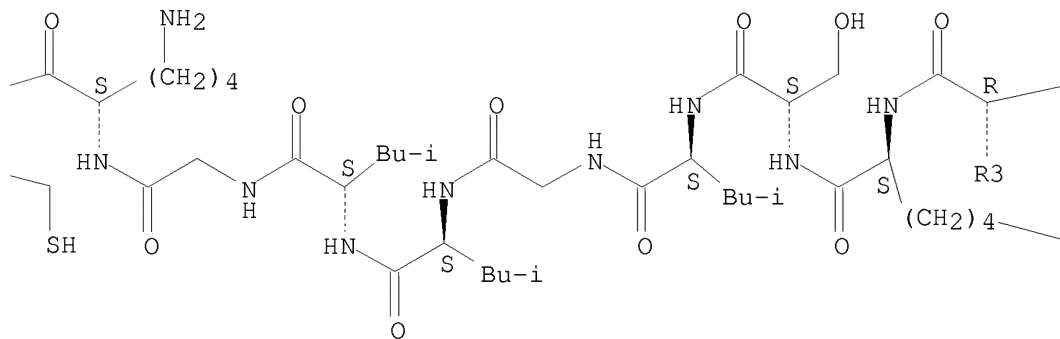
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

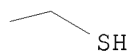
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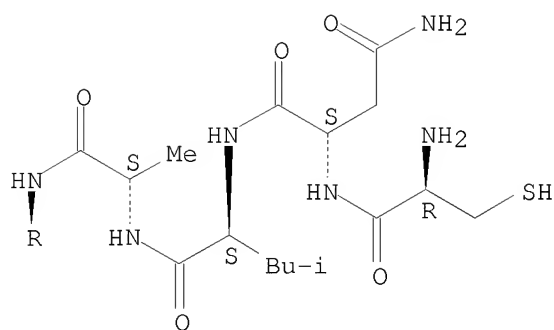
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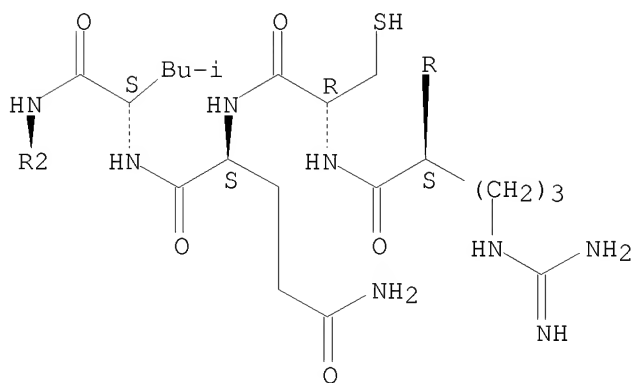
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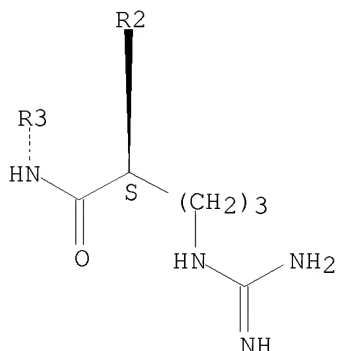


PAGE 2-A



PAGE 3-A





REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:42538 HCAPLUS

DOCUMENT NUMBER: 138:117631

TITLE: Method for screening for molecules which can bind to immunodeficiency virus gp120 protein

INVENTOR(S): Vita, Claudio; Royer, Catherine; Pogenberg, Vivian

PATENT ASSIGNEE(S): Commissariat A L'Energie Atomique, Fr.; Institut National De La Sante Et De La Recherche Medicale

SOURCE: PCT Int. Appl., 96 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003005032	A2	20030116	WO 2002-FR2349	20020704
WO 2003005032	A3	20031204		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
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FR 2827046	A1	20030110	FR 2001-9015	20010706
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CA 2452663	A1	20030116	CA 2002-2452663	20020704
AU 2002324114	A1	20030121	AU 2002-324114	20020704
PRIORITY APPLN. INFO.:			FR 2001-9015	A 20010706
			WO 2002-FR2349	W 20020704

OTHER SOURCE(S): MARPAT 138:117631

AB The invention discloses a method for screening for mols. which can bind to the immunodeficiency virus gp120 protein. The inventive method uses fluorescence polarization and the peptide TPA-Xaaa-Xaab-Ala or Gln or His-Arg or Phe-Cys-Xaac-Xaad-Arg-Cys-Lys-Xaae- Xaaf-Xaag-Xaah-Leu ou Lys-Xaai-Lys- Cys-Ala or Gln-Gly or D-Asp or Ser- Ser or His or Asn-Xaaj-Cys-Thr or Ala-Cys-Xaak-NH2, (TPA = thiopropionic acid; Xaaa,

Xaab, Xaac, Xaad, Xaae, Xaaf, Xaag, Xaah, and Xaai = natural or non-natural amino acid; XaaJ = β -naphthylalanine, phenylalanine, bi-phenylalanine; Xaak = Gly, Val, Ile). The inventors have prepared a family of peptides reproducing a portion of the structure of the CD4 region resembling the Ig CDR2 region.

IT 444585-61-9P 444585-62-0P 444585-63-1P
 444585-64-2P 444585-65-3P 444585-66-4P
 444585-67-5P 444585-68-6P 485801-88-5P
 485801-96-5P 487059-89-2P 487065-87-2P
 487065-88-3P 487065-90-7P 487065-91-8P

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(immunodeficiency virus gp120-binding mol. screening method)

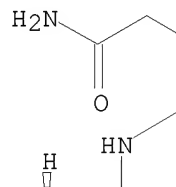
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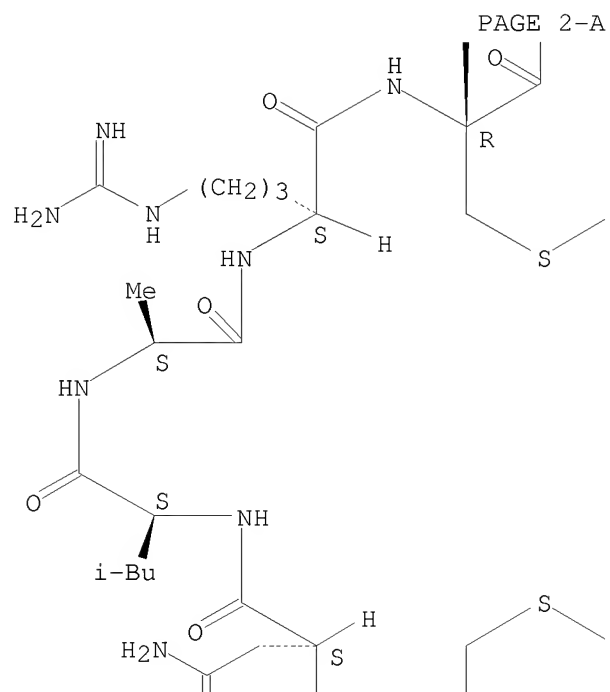
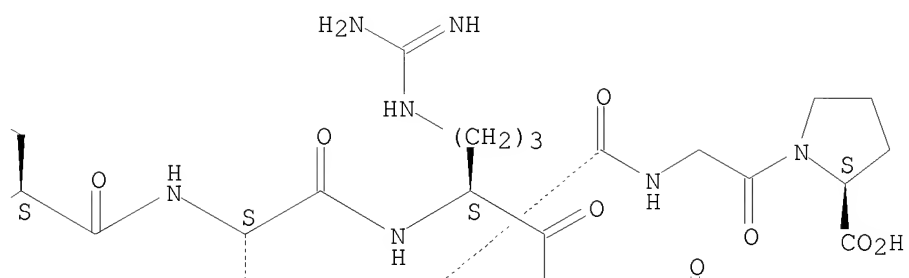
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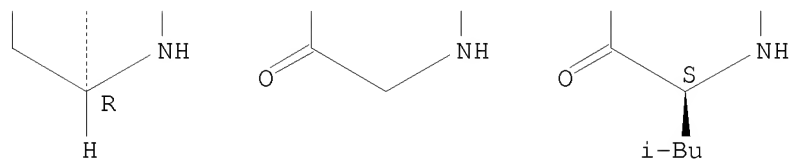
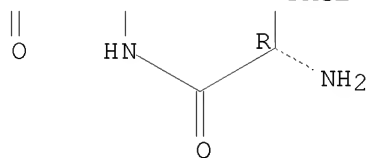
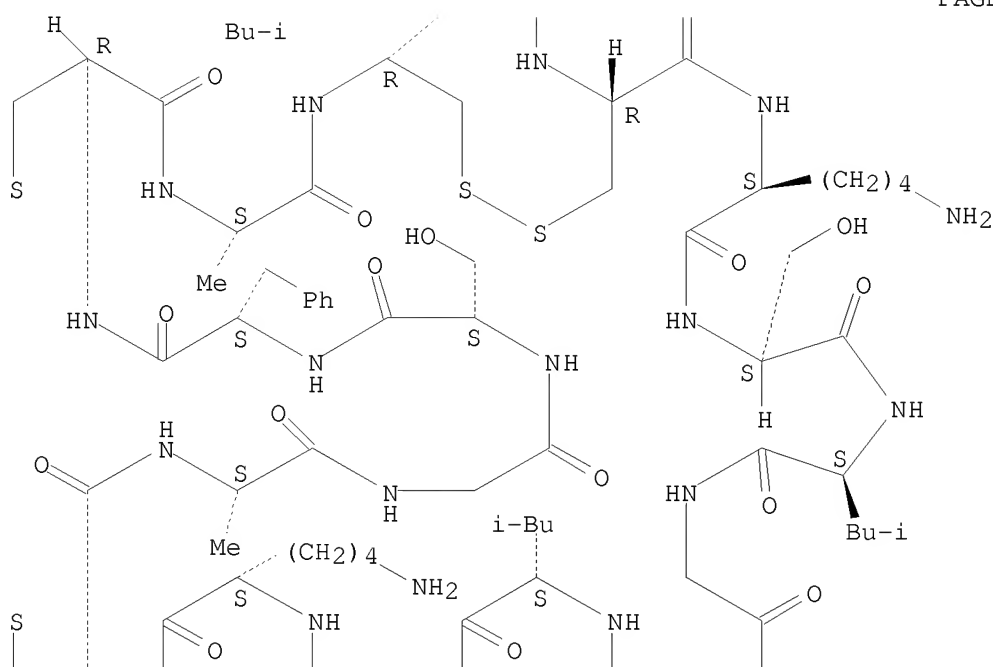
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

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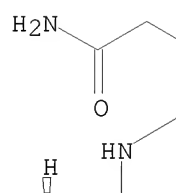
RN 444585-62-0 HCAPLUS

CN L-Proline, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI)
(CA INDEX NAME)

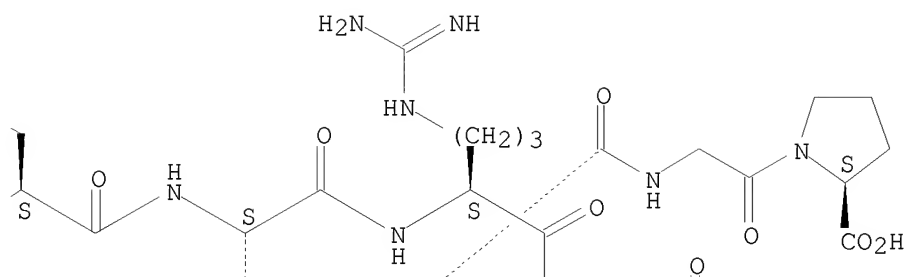
SEQ 1 XNLARCQLRC KSLGLLGKCA GSFCACGP

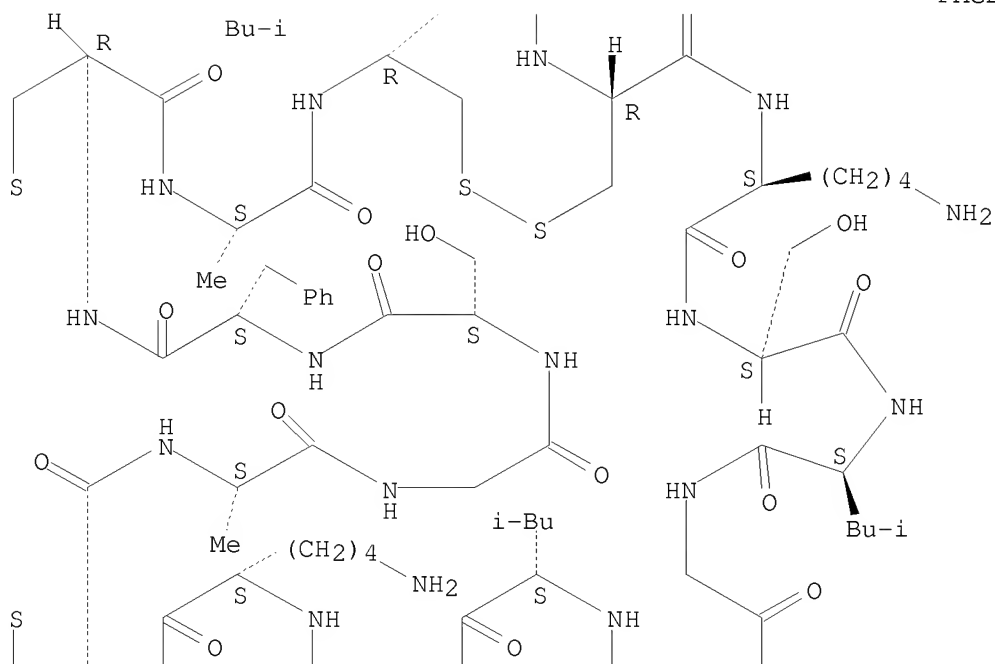
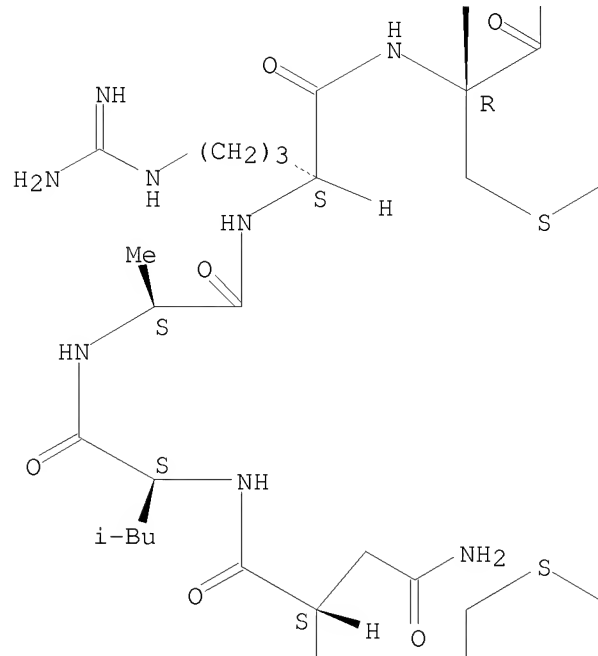
Absolute stereochemistry.

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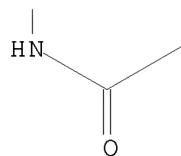


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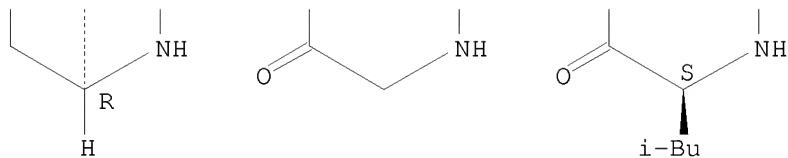




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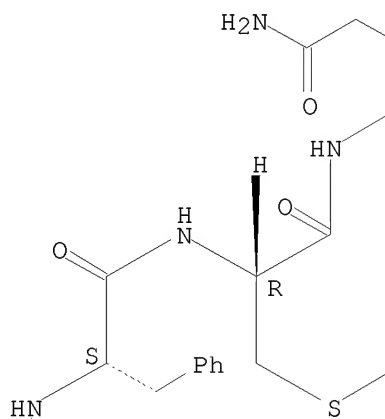


RN	444585-63-1	HCAPLUS
CN	L-Valine, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-alanyl-L-phenylalanyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI) (CA INDEX NAME)	

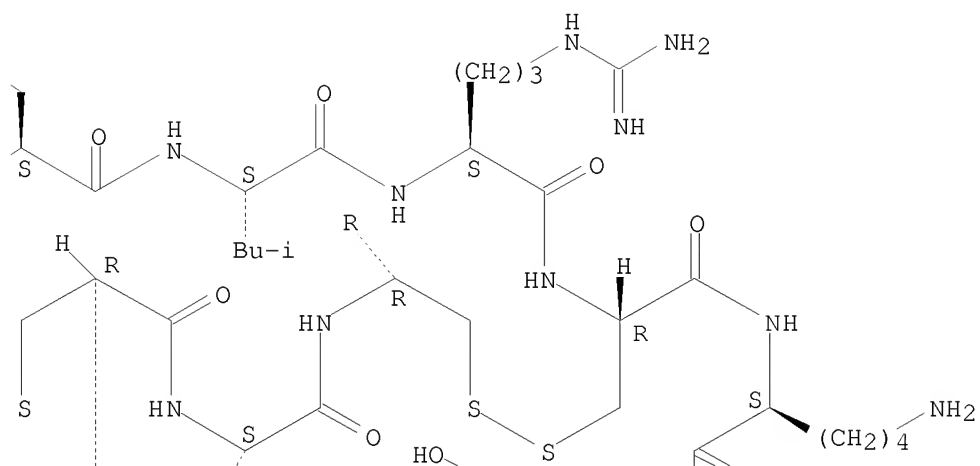
SEQ 1 XNLAFCQLRC KSLGLLGKCA GSFCACV

Absolute stereochemistry.

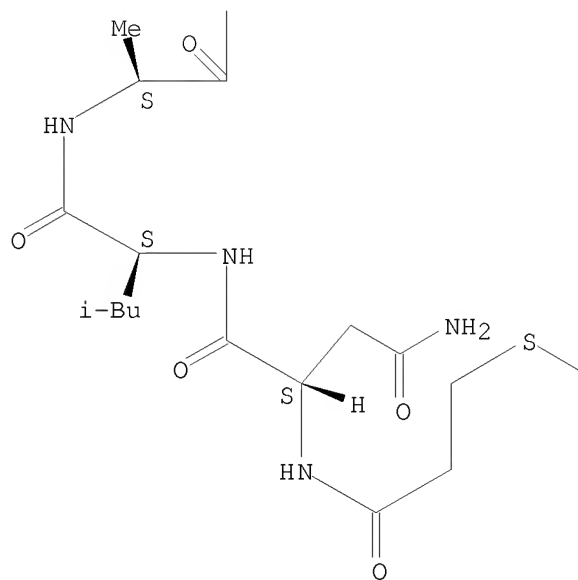
PAGE 1-A

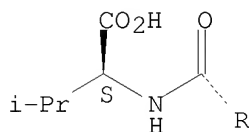
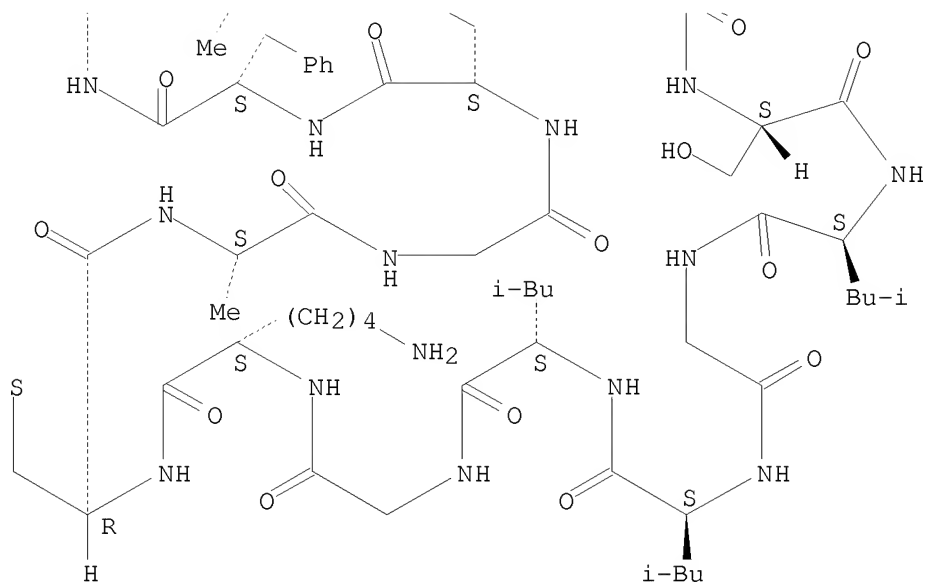


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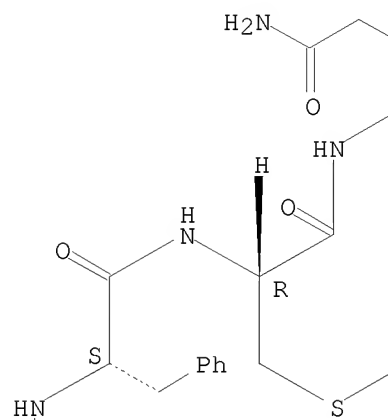


RN	444585-64-2	HCAPLUS
CN	L-Valine, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-alanyl-L-phenylalanyl-L-cysteinyl-L-glutaminy-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanyl-L-seryl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI) (CA INDEX NAME)	

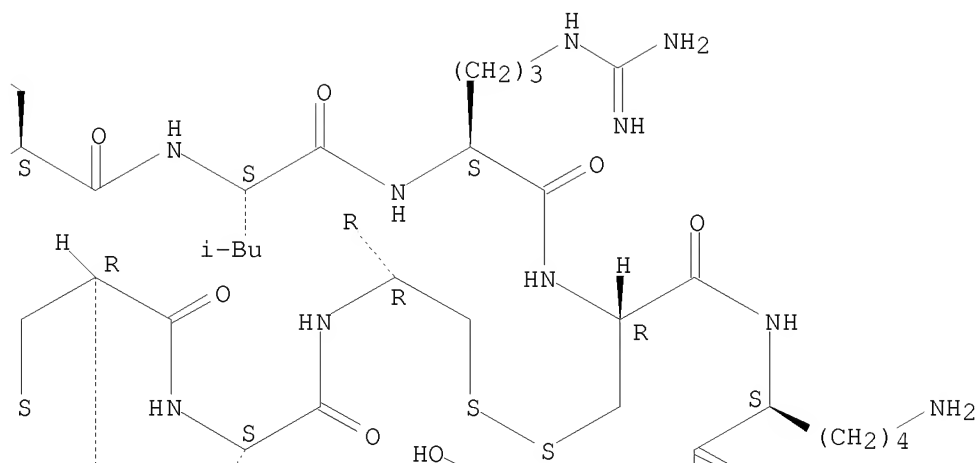
SEQ 1 XNLAFCQLRC KSLGLLGKCA SSFCACV

Absolute stereochemistry.

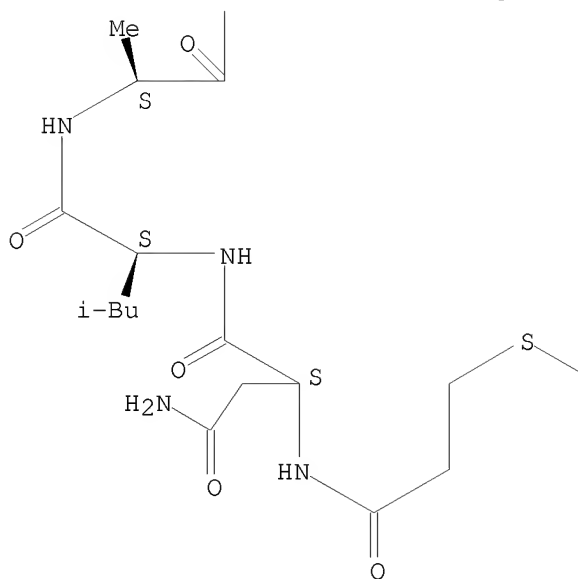
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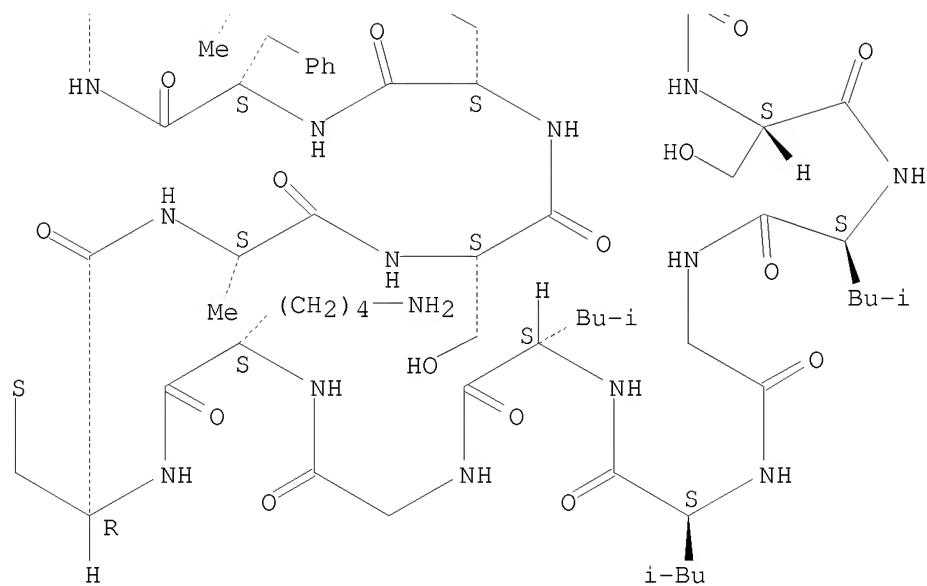
PAGE 1-C



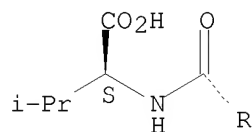
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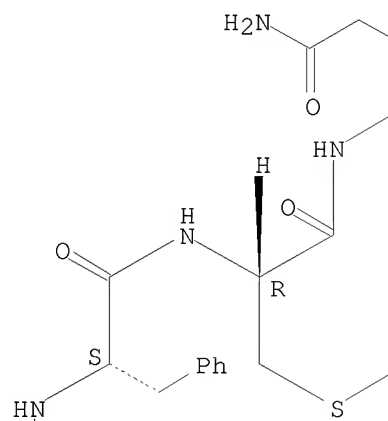
RN 444585-65-3 HCAPLUS
 CN L-Valine, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-alanyl-L-phenylalanyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-

lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteiny-L-
alanylglycyl-L-histidyl-L-phenylalanyl-L-cysteiny-L-alanyl-L-cysteiny-L-,
cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI)
(CA INDEX NAME)

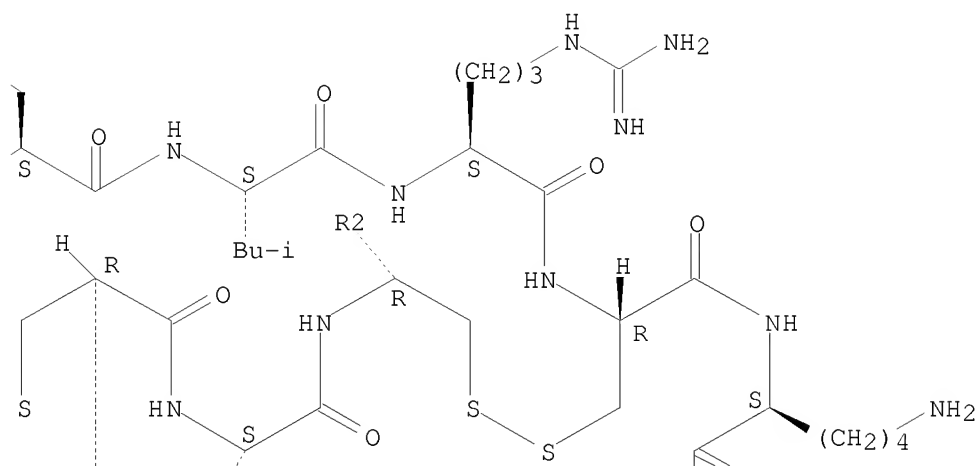
SEQ 1 XNLAFCQLRC KSLGLLGKCA GHFCACV

Absolute stereochemistry.

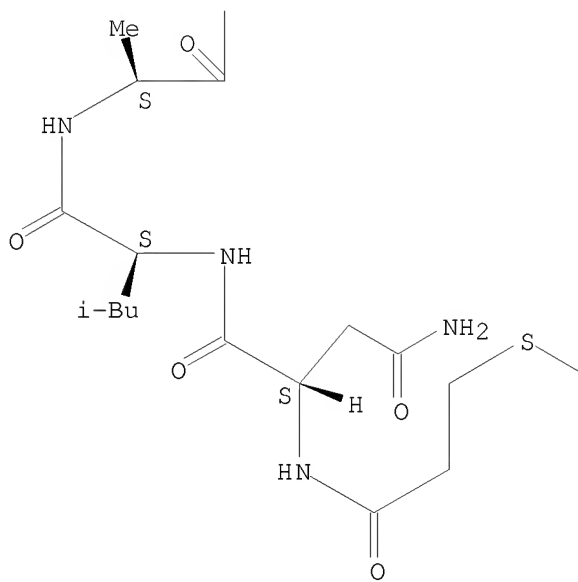
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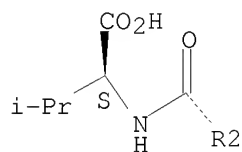
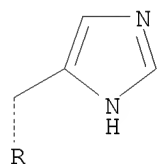
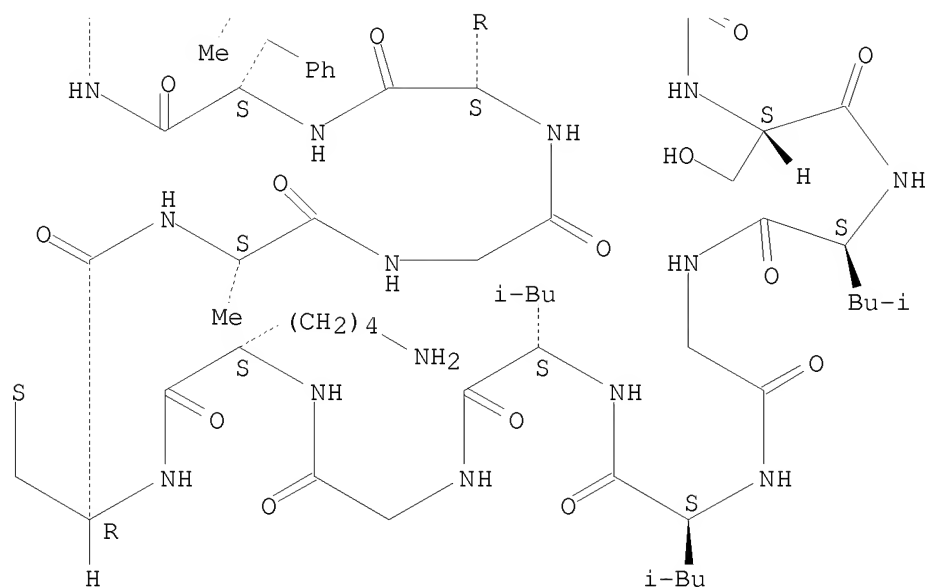


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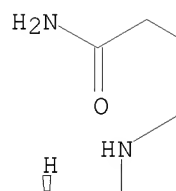


RN 444585-66-4 HCAPLUS
 CN L-Valine, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-alanyl-L-phenylalanyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-asparaginyl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI)
 (CA INDEX NAME)

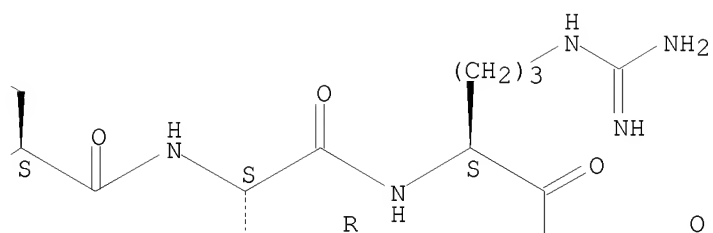
SEQ 1 XNLAFCQLRC KSLGLLGKCA GNFCACV

Absolute stereochemistry.

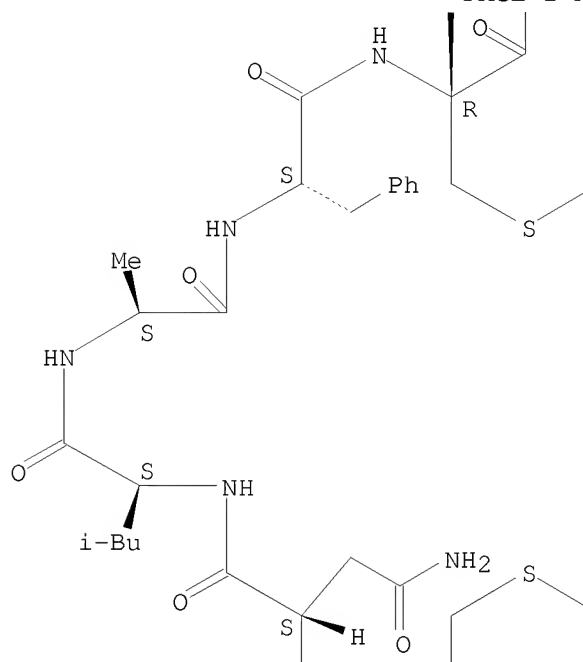
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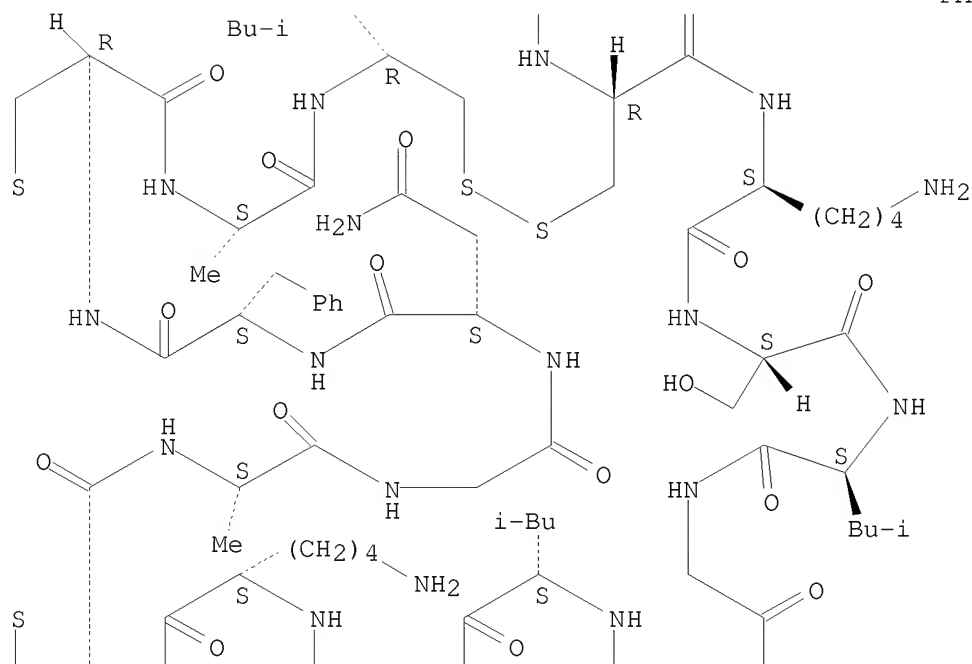
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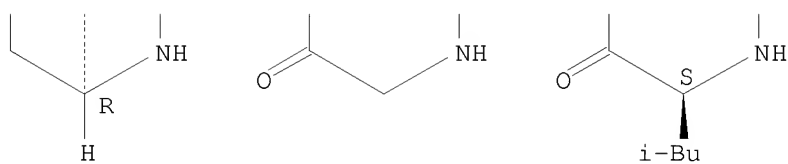
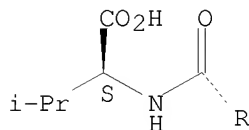
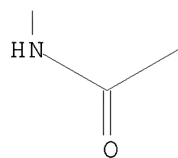


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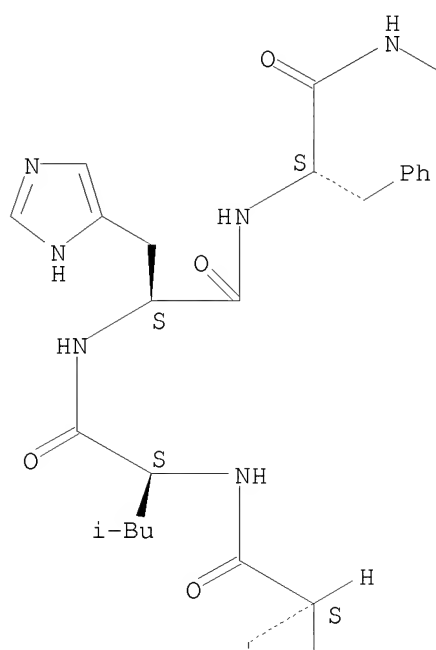
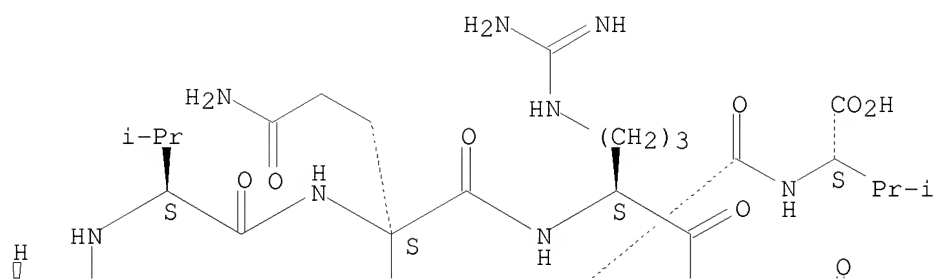


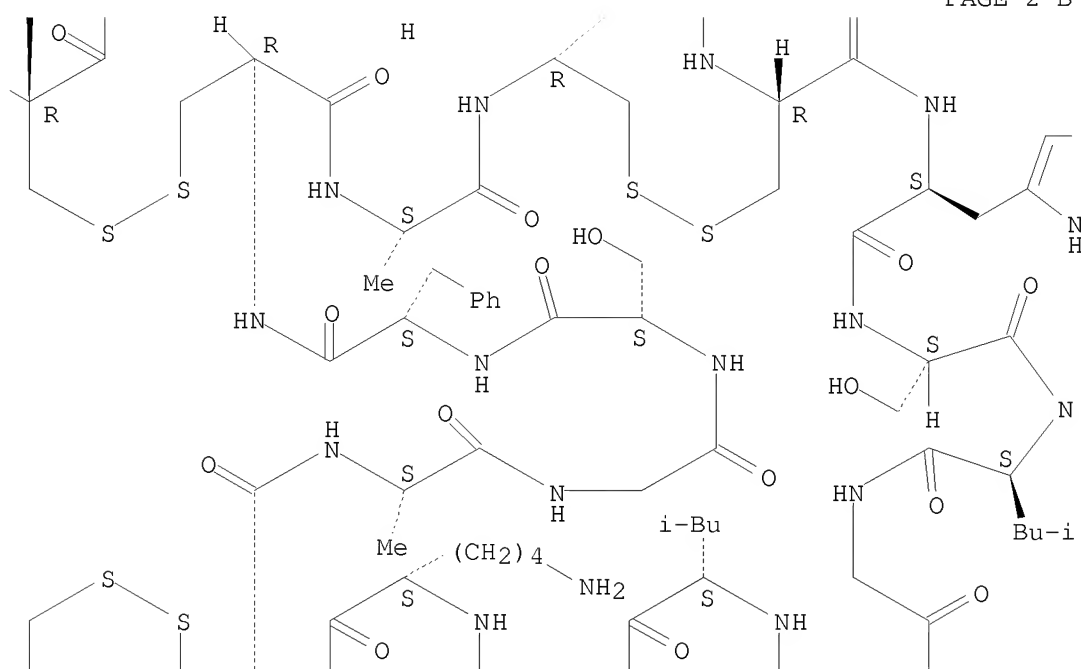
RN 444585-67-5 HCAPLUS

CN L-Valine, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-valyl-L-glutamyl-L-arginyl-L-cysteinyl-L-histidyl-L-seryl-L-leucylglycyl-L-lysyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanyl-glycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI)
(CA INDEX NAME)

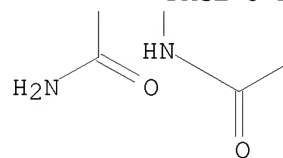
SEQ 1 XNLHFCVQRC HSLGKLGKCA GSFCACV

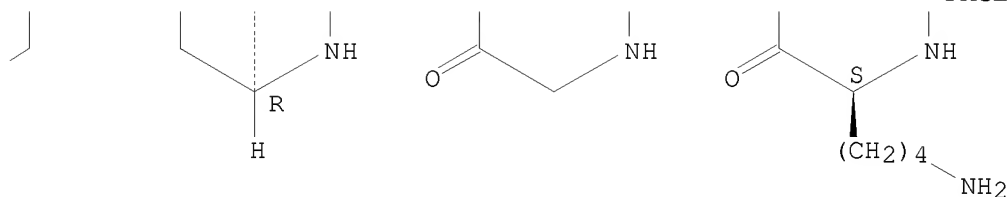
Absolute stereochemistry.





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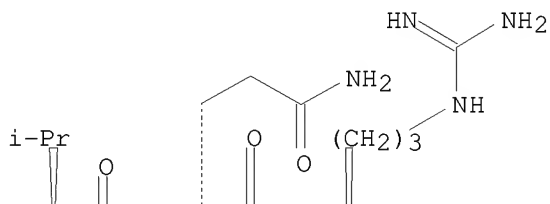


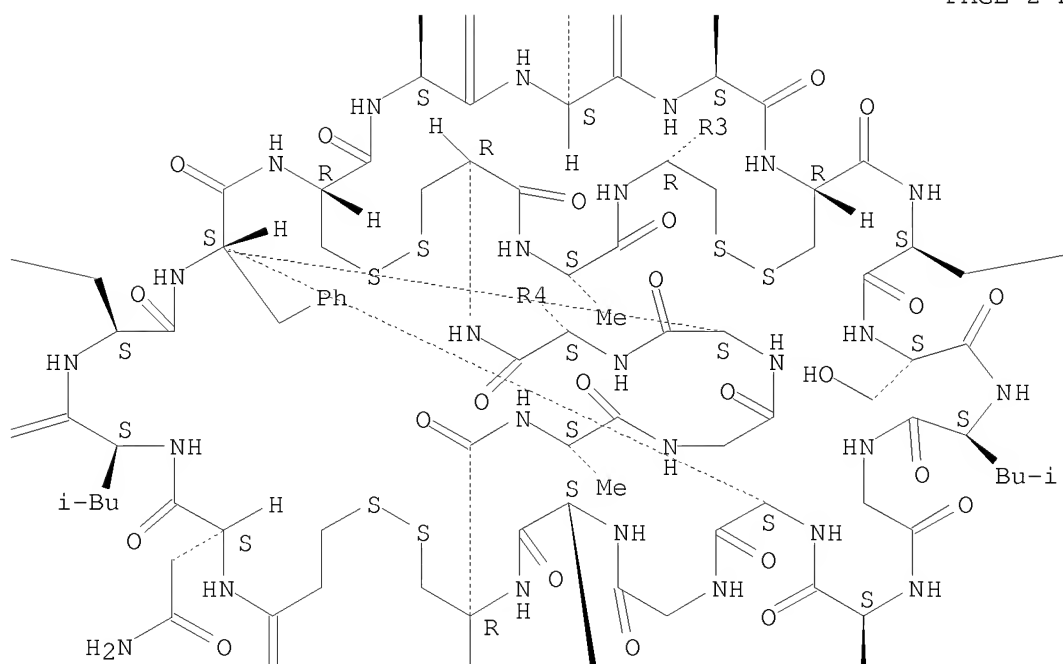
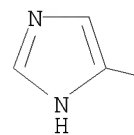
RN 444585-68-6 HCAPLUS

CN L-Valine, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-valyl-L-glutaminyl-L-arginyl-L-cysteinyl-L-histidyl-L-seryl-L-leucylglycyl-L-leucyl-L-lysylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI)
(CA INDEX NAME)

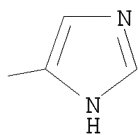
SEQ 1 XNLHFCVQRC HSLGLKGKCA GSFCACV

Absolute stereochemistry.

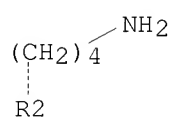
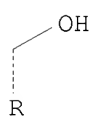




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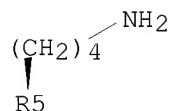
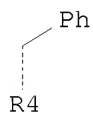
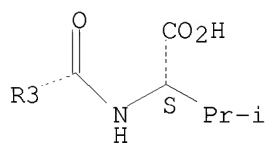


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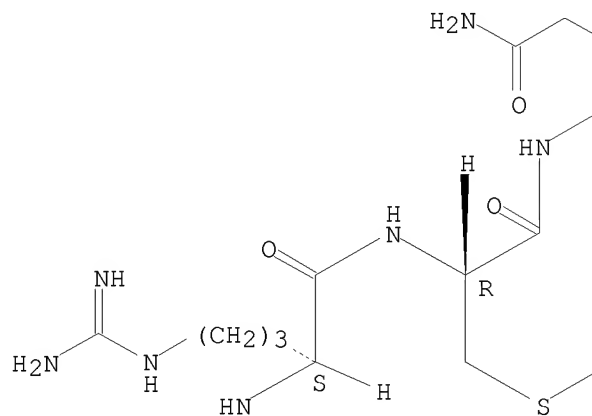


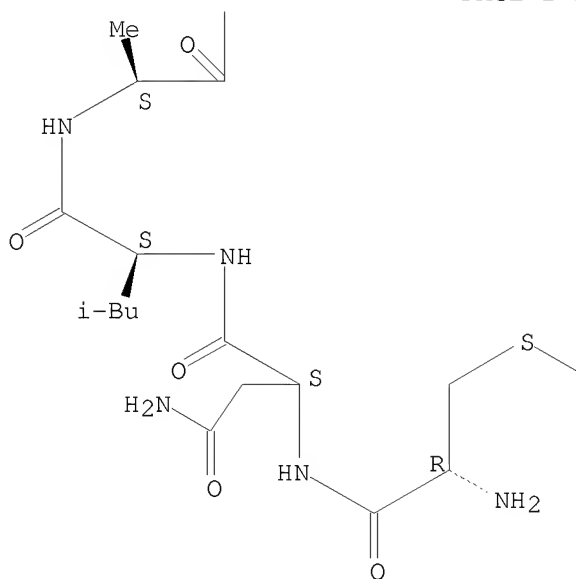
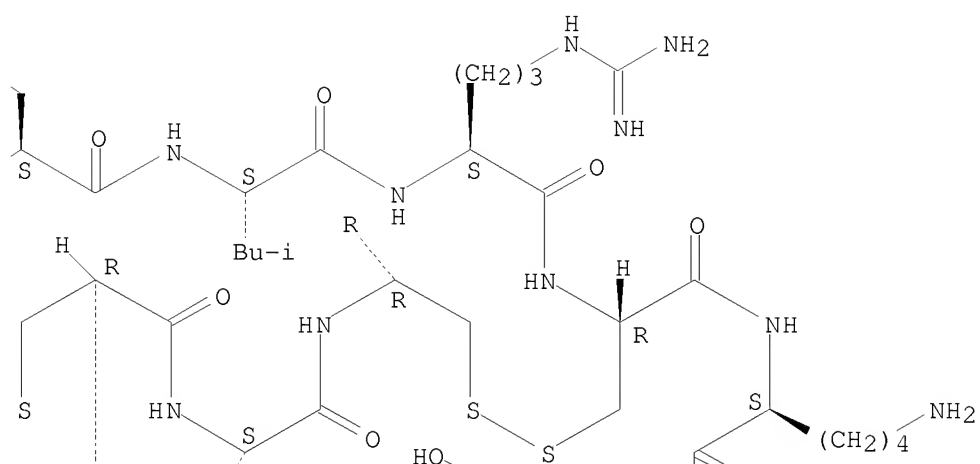


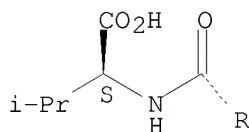
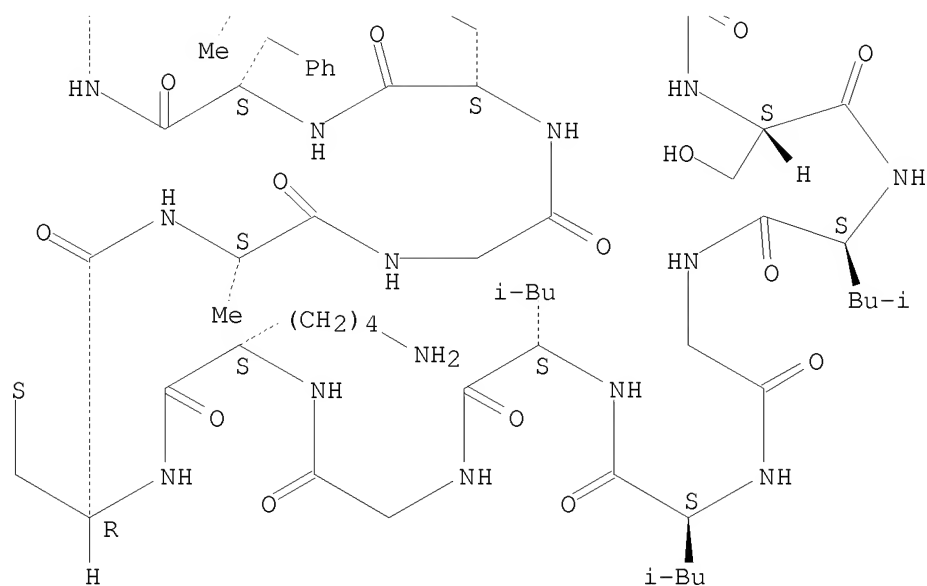
RN	485801-88-5	HCAPLUS
CN	L-Valine, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminy-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→19), (6→24), (10→26)-tris(disulfide) (9CI) (CA INDEX NAME)	

SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACV

Absolute stereochemistry.





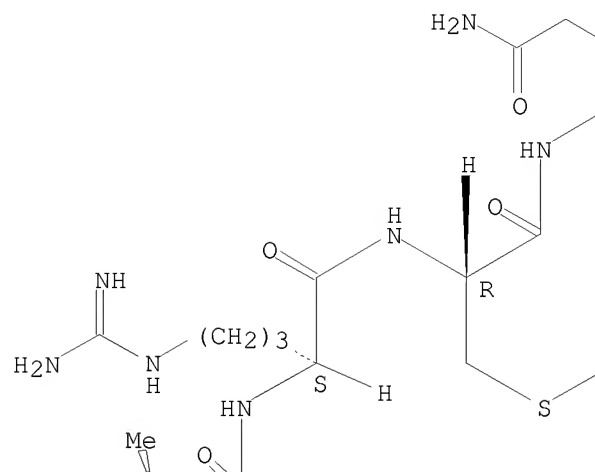


RN 485801-96-5 HCAPLUS
 CN L-Proline, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-alanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-, cyclic (1→19), (6→24), (10→26)-tris(disulfide) (9CI) (CA INDEX NAME)

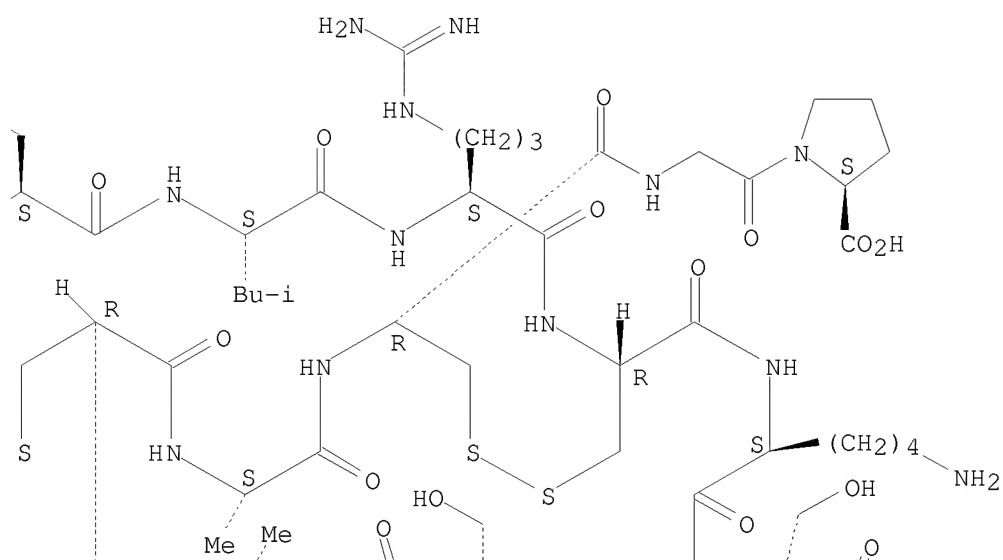
SEQ 1 CNLARCQLRC KSLGLLGKCA GSACACGP

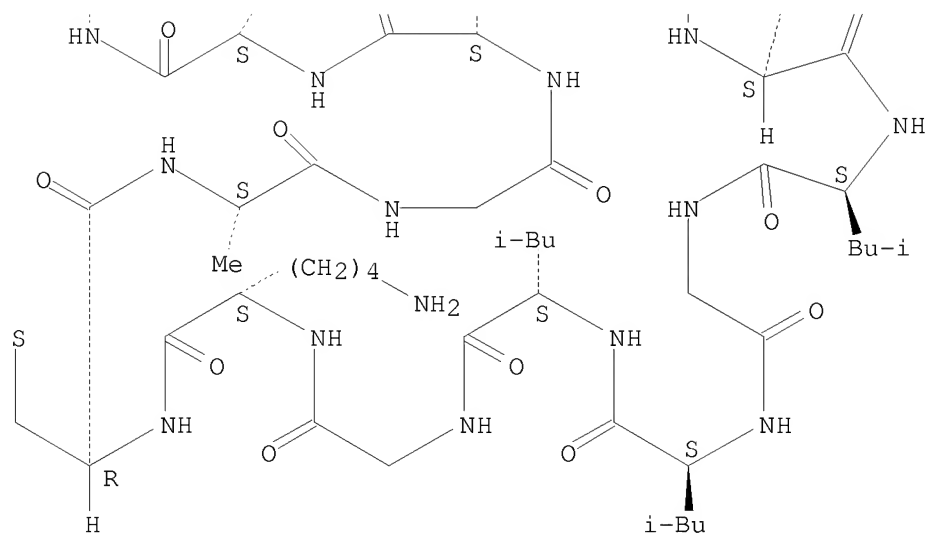
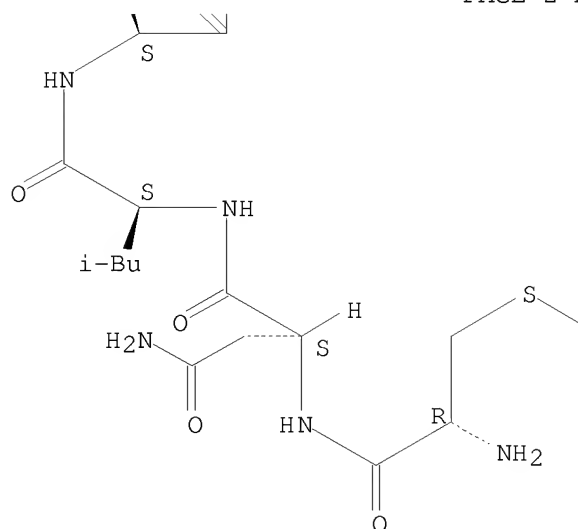
Absolute stereochemistry.

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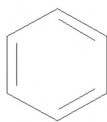
RN 487059-89-2 HCAPLUS

CN L-Proline, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanyl-glycyl-L-seryl-3-[1,1'-biphenyl]ylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-, cyclic (1→19), (6→24), (10→26)-tris(disulfide) (9CI)
(CA INDEX NAME)

NTE modified (modifications unspecified)

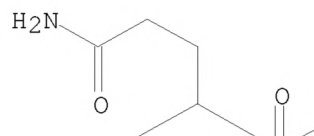
SEQ 1 CNLARCQLRC KSLGLLGKCA GSACACGP

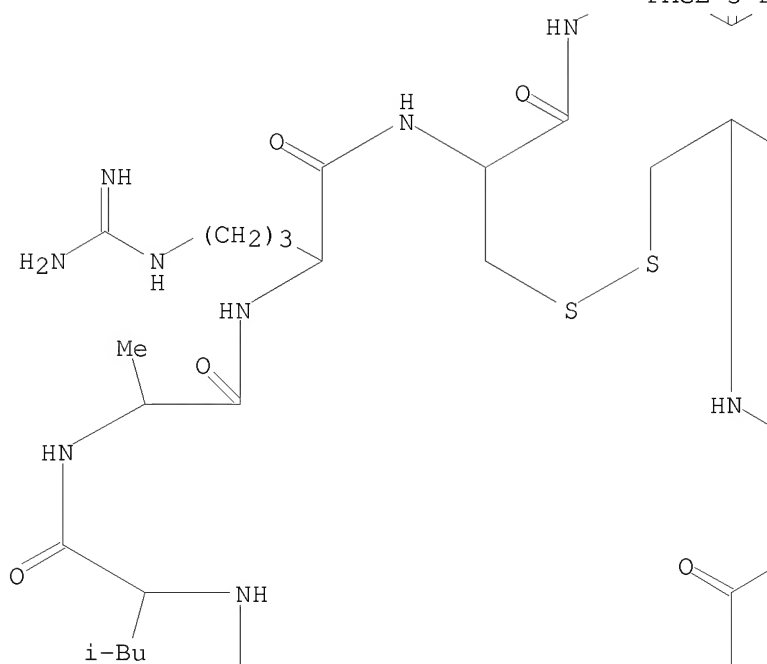
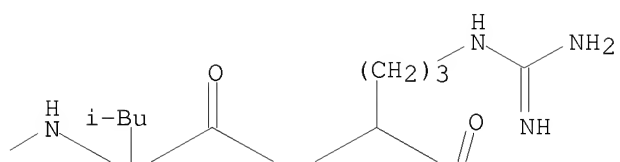
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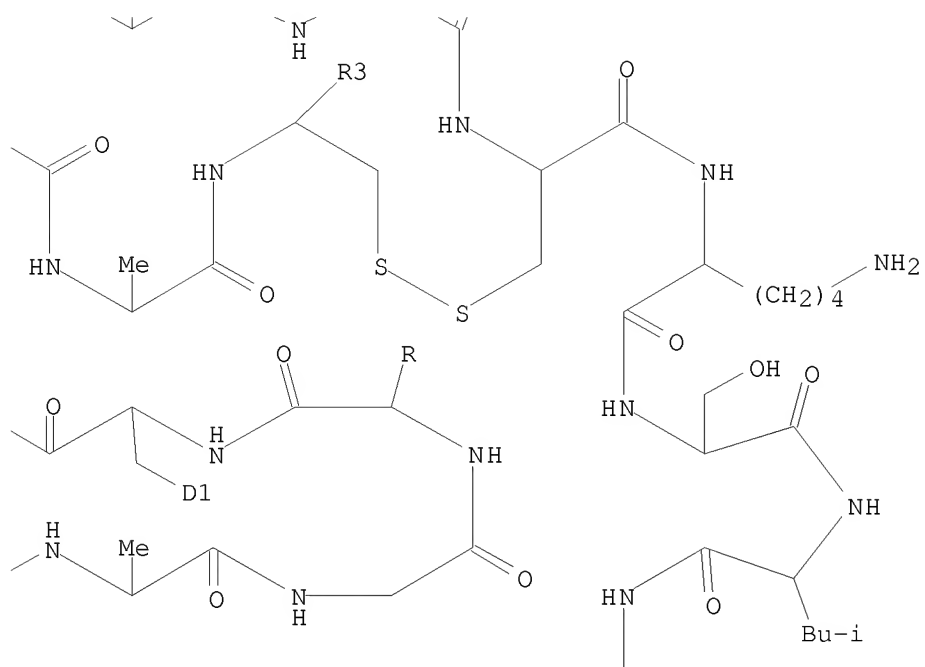
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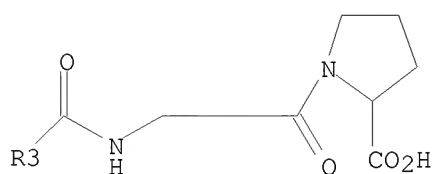
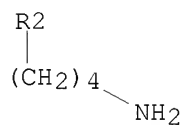
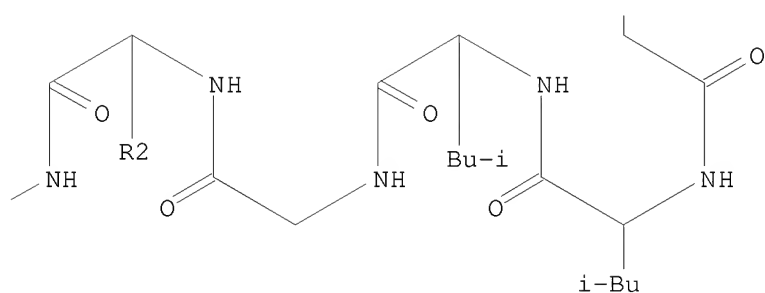
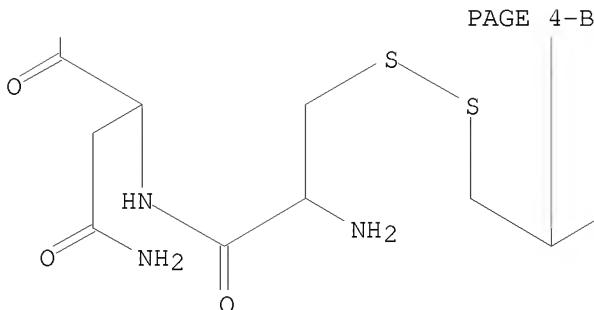


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RN 487065-87-2 HCAPLUS
 CN Peptide, (Cys-Asn-Leu-His-Phe-Cys-Val-Gln-Arg-Cys-His-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 CNLHFCVQRC HSLGLLGKCA GSXCACV

RN 487065-88-3 HCAPLUS
 CN Peptide, (Xaa-Asn-Leu-Gln-Phe-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLQFCQLRC KSLGLLGKCA GSXCACV

RN 487065-90-7 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-Ala-Arg-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLARCQLRC KSLGLLGKCA GSXCACV

RN 487065-91-8 HCAPLUS
CN Peptide, (Xaa-Asn-Leu-His-Phe-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

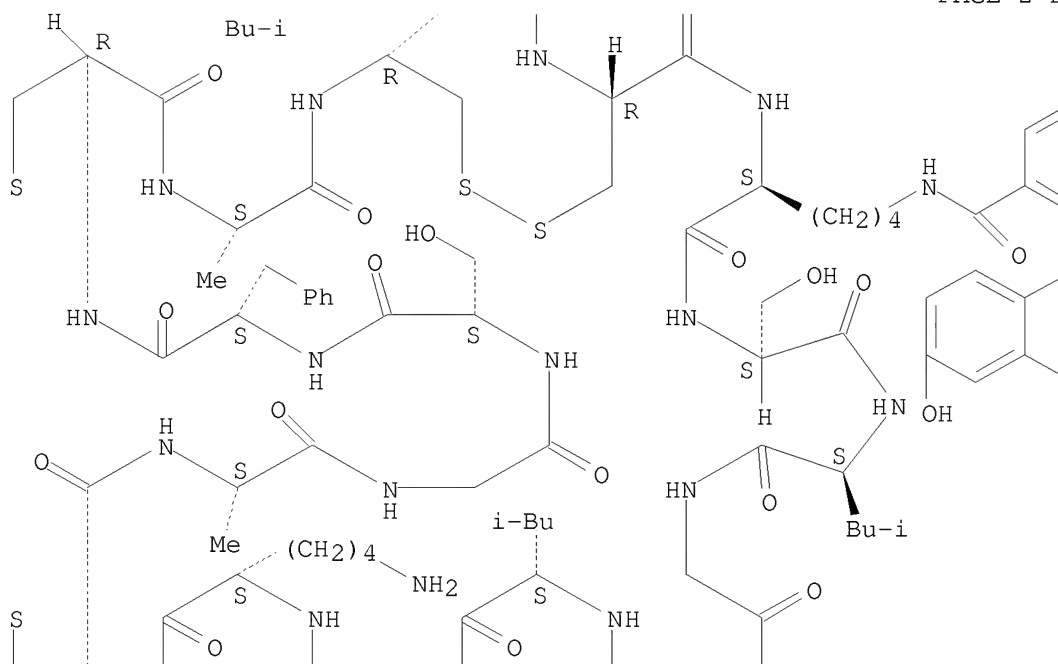
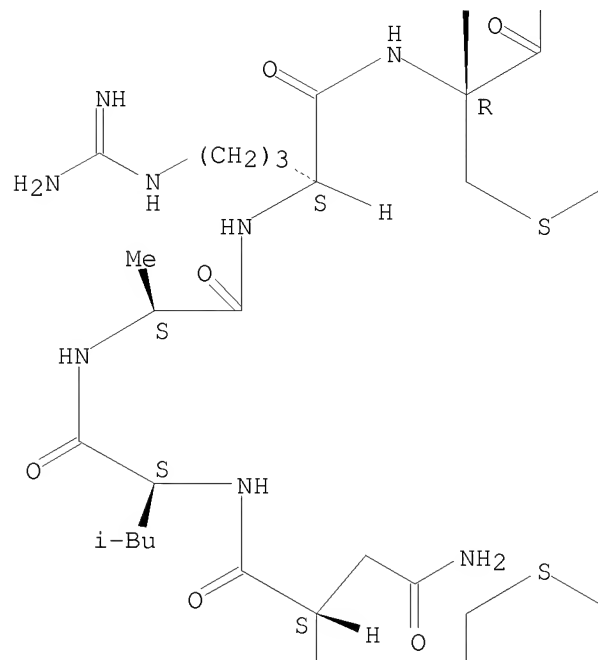
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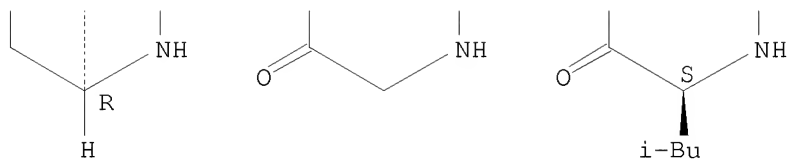
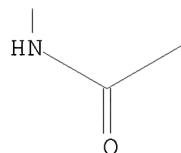
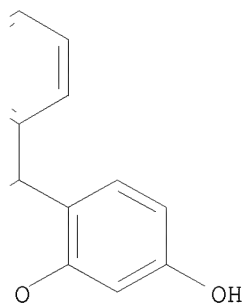
IT 485801-90-9P 485801-92-1P 485801-94-3P
487065-91-8DP, fluoresceinated and biotinylated derivs.
RL: BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(immunodeficiency virus gp120-binding mol. screening method)
RN 485801-90-9 HCAPLUS
CN L-Proline, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-N6-[2-(3,6-dihydroxy-9H-xanthen-9-yl)benzoyl]-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-, cyclic
(1→18), (5→23), (9→25)-tris(disulfide) (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 XNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.





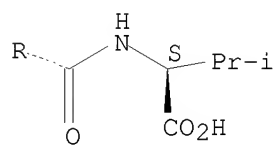
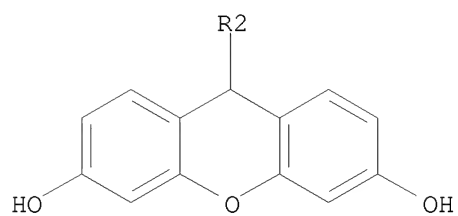
RN 485801-92-1 HCAPLUS
 CN L-Valine, N2-(3-mercaptopropionyl)-L-asparaginyl-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-valyl-L-glutaminyl-L-arginyl-L-cysteinyl-L-histidyl-L-seryl-L-leucylglycyl-N6-[2-(3,6-dihydroxy-9H-xanthen-9-yl)benzoyl]-L-lysyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanyl-glycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

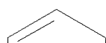
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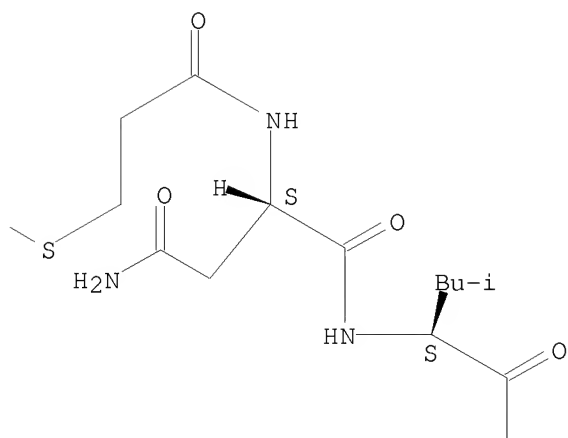
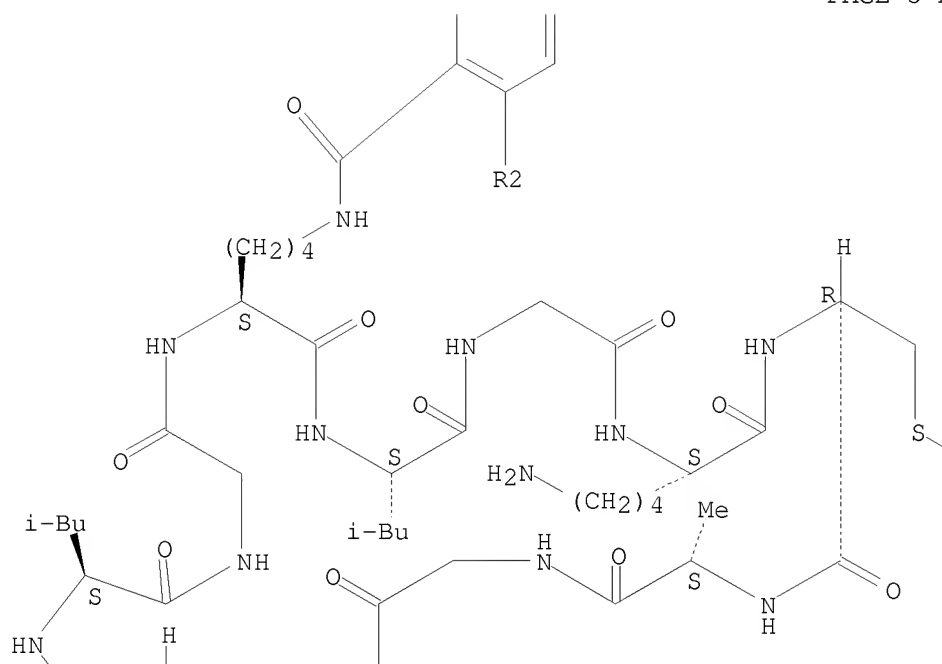
Absolute stereochemistry.

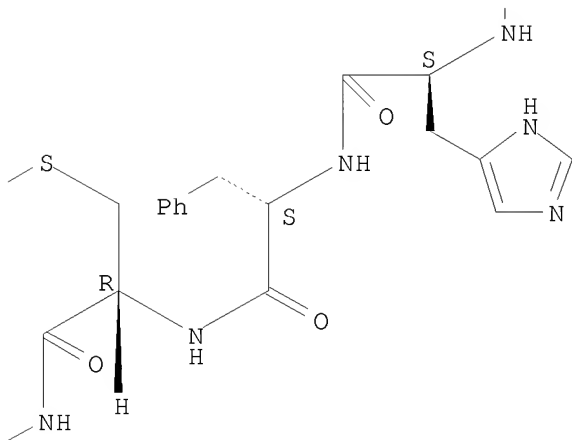
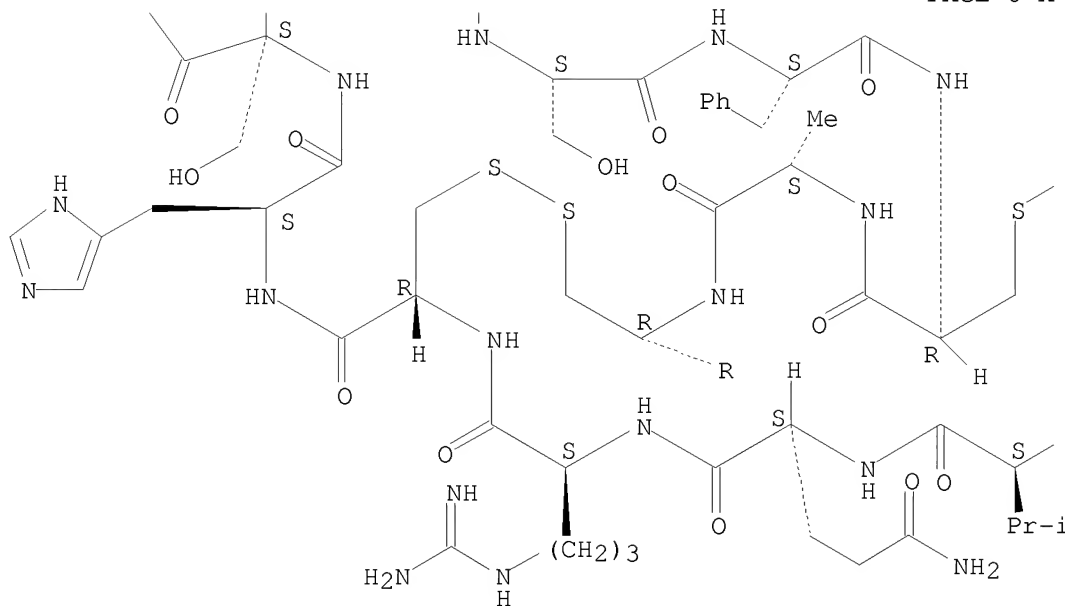
PAGE 1-A



PAGE 4-A







RN 485801-94-3 HCAPLUS
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NTE modified (modifications unspecified)

SEQ 1 XNLHFCVQRC HSLGLKGKCA GSFCACV

RN 487065-91-8 HCAPLUS

CN Peptide, (Xaa-Asn-Leu-His-Phe-Cys-Gln-Leu-Arg-Cys-Lys-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLHFCQLRC KSLGLLGKCA GSXCACV

L4 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:1890 HCAPLUS

DOCUMENT NUMBER: 138:121296

TITLE: Rational design of a CD4 mimic that inhibits HIV-1 entry and exposes cryptic neutralization epitopes

AUTHOR(S): Martin, Loic; Stricher, Francois; Misse, Dorothee; Sironi, Francesca; Pugniere, Martine; Barthe, Philippe; Prado-Gotor, Rafael; Freulon, Isabelle; Magne, Xavier; Roumestand, Christian; Menez, Andre; Lusso, Paolo; Veas, Francisco; Vita, Claudio

CORPORATE SOURCE: Department of Protein Engineering and Research, CEA Saclay, Gif-sur-Yvette, 91191, Fr.

SOURCE: Nature Biotechnology (2003), 21(1), 71-76
CODEN: NABIF9; ISSN: 1087-0156

PUBLISHER: Nature Publishing Group

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The conserved surfaces of the human immunodeficiency virus (HIV)-1 envelope involved in receptor binding represent potential targets for the development of entry inhibitors and neutralizing antibodies. Using structural information on a CD4-gp120-17b antibody complex, we have designed a 27-amino acid CD4 mimic, CD4M33, that presents optimal interactions with gp120 and binds to viral particles and diverse HIV-1 envelopes with CD4-like affinity. This mini-CD4 inhibits infection of both immortalized and primary cells by HIV-1, including primary patient isolates that are generally resistant to inhibition by soluble CD4. Furthermore, CD4M33 possesses functional properties of CD4, including the ability to unmask conserved neutralization epitopes of gp120 that are cryptic on the unbound glycoprotein. CD4M33 is a prototype of inhibitors of HIV-1 entry and, in complex with envelope proteins, a potential component of vaccine formulations, or a mol. target in phage display technol. to develop broad-spectrum neutralizing antibodies.

IT 491596-19-1

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(CD4 mimic, CD4M33 peptides in developing neutralizing antibodies that inhibits HIV-1 entry)

RN 491596-19-1 HCAPLUS

CN L-Valinamide, N2-(1-thioxopropyl)-L-asparaginy-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-glutaminy-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-3-[1,1'-biphenyl]-4-yl-L-alanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (5→23), (9→25)-bis(disulfide) (CA INDEX NAME)

NTE modified

SEQ 1 NLHFCQLRCK SLGLLGKCAG SFCACV

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:814665 HCAPLUS

DOCUMENT NUMBER: 137:336719

TITLE: Chimeric protein comprising virus coat protein and virus receptor for producing antibody and for preventing viral infection

INVENTOR(S): Devico, Anthony Louis; Fouts, Timothy R.; Tuskan, Robert G.

PATENT ASSIGNEE(S): University of Maryland Biotechnology Institute, USA

SOURCE: U.S. Pat. Appl. Publ., 71 pp., Cont.-in-part of U.S. Ser. No. 684,026.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20020155121	A1	20021024	US 2001-934060	20010821
US 6908612	B2	20050621		
US 7311920	B1	20071225	US 2000-684026	20001006
CA 2457414	A1	20030227	CA 2002-2457414	20020821
WO 2003016333	A2	20030227	WO 2002-US26543	20020821
WO 2003016333	A3	20030731		
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RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2002355966	A1	20030303	AU 2002-355966	20020821
AU 2002355966	B2	20070118		
EP 1425036	A2	20040609	EP 2002-794930	20020821
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK			
BR 2002012093	A	20041130	BR 2002-12093	20020821
CN 1561229	A	20050105	CN 2002-819350	20020821
JP 2005503147	T	20050203	JP 2003-521255	20020821
MX 2004PA01585	A	20050307	MX 2004-PA1585	20040220
ZA 2004002190	A	20050506	ZA 2004-2190	20040318
US 20050221445	A1	20051006	US 2005-124027	20050506
US 7399473	B2	20080715		

PRIORITY APPLN. INFO.:
US 1999-158321P P 19991008
US 2000-684026 A2 20001006
US 2001-934060 A 20010821
WO 2002-US26543 W 20020821

AB The invention relates to chimeric mols. comprising a virus coat sequence and a receptor sequence that can interact with each other to form a complex that is capable of binding a co-receptor. Such chimeric mols. therefore exhibit functional properties characteristic of a receptor-coat protein complex and are useful as agents that inhibit virus infection of cells due to occupancy of a co-receptor present on the cell. In particular aspects, the chimeric polypeptide includes an immunodeficiency virus envelope polypeptide, such as that of HIV, SIV, FIV, FeLV, FPV and herpes virus. The coat protein is e.g. HIV envelope protein or gp120, and the receptor is e.g. CD4 D1D2 domains and CD4M9 sequence.

IT 473960-25-7P

RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)

(amino acid sequence; chimeric protein comprising virus coat protein and virus receptor for producing antibody and for preventing viral infection)

RN 473960-25-7 HCAPLUS

CN Envelope protein gp120env [506-threonine] (human immunodeficiency virus 1 strain BaL) fusion protein with peptide (synthetic linker) fusion protein with CD4 (antigen) (human M9 domain fragment) fusion protein with peptide (synthetic myc tag) (9CI) (CA INDEX NAME)

SEQ 1 MPMGSLQPLA TLYLLGMLVA SCLGNAEEKL WVTVYYGVPV WKEATTTLFC
51 ASDRKAYDTE VHNVWATHAC VPTDPNPQEV ELKNVTENFN MWKNNMVEQM
101 HEDIISLWDQ SLKPCVKLTP LCVTLNCTDL RNATNGNDTN TTSSSRGMVG
151 GGEMKNCSFN ITTNIRGKVQ KEYALFYKLD IAPIDNNSNN RYRLISCNTS
201 VITQACPKVS FEPIPIHYCA PAGFAILKCK DKKFNGKGPC TNVSTVQCTH
251 GIRPVVSTQL LLNGSLAEEE VVIRSANFAD NAKVIIIVQLN ESVEINCTRP
301 NNNTRKSIHI GPGRAFYTTG EIIGDIRQAH CNLSRAKWND TLNKIVIKLR
351 EQFGNKTIIV KHSSGGDPEI VTHSFNCGGE FFYCNSTQLF NSTWNVTEES
401 NNTVENNTIT LPCRIKQIIN MWQEVGRAMY APPIRGQIRC SSNITGLLLT
451 RDGGPEDNKT EVFRPGGGDM RDNWRSELYK YKVVKIEPLG VAPTKAKRRV
501 VQREKTGSSG GGGSGSGGGG SGGGAAACNL ARCQLRCKSL GLLGKCAGSF
551 CACGPX

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:575101 HCAPLUS

DOCUMENT NUMBER: 137:150211

TITLE: CD4-mimic peptides having affinity for the gp120 viral protein and use thereof

INVENTOR(S): Vita, Claudio; Martin, Loic; Roumestand, Christian; Veas, Francisco

PATENT ASSIGNEE(S): Commissariat A L'energie Atomique, Fr.

SOURCE: PCT Int. Appl., 81 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2002059146	A2	20020801	WO 2002-FR227	20020121
WO 2002059146	A3	20021205		
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RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
FR 2819809	A1	20020726	FR 2001-893	20010123
FR 2819809	B1	20030516		

CA 2435097	A1	20020801	CA 2002-2435097	20020121
AU 2002233424	A1	20020806	AU 2002-233424	20020121
AU 2002233424	B2	20060105		
EP 1368372	A2	20031210	EP 2002-700342	20020121
EP 1368372	B1	20070815		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004535366	T	20041125	JP 2002-559448	20020121
CN 1304421	C	20070314	CN 2002-803983	20020121
AT 370160	T	20070915	AT 2002-700342	20020121
ES 2291439	T3	20080301	ES 2002-700342	20020121
MX 2003PA06263	A	20050429	MX 2003-PA6263	20030711
IN 2003DN01121	A	20070525	IN 2003-DN1121	20030717
ZA 2003005576	A	20040721	ZA 2003-5576	20030718
US 20060121538	A1	20060608	US 2003-466835	20030722
US 7374875	B2	20080520		

PRIORITY APPLN. INFO.:

FR 2001-893	A	20010123
WO 2002-FR227	W	20020121

AB The invention discloses a family of CD4-mimic peptides exhibiting high affinity and specificity for the AIDS virus envelope, especially the gp120 viral

protein, as well as methods for producing the peptides, and the use of the peptides. The inventive peptides comprise the sequence TPA-P1-Cys-P2-Cys-P3-Cys-Ala or Gln-Gly or D-Asp or Ser or His or Asn-XaaJ-Cys Thr or Ala-Cys-Xaak-NH2 (TPA = thiopropionic acid; XaaJ = β -naphthylalanine, phenylalanine, bi-phenylalanine; Xaak = Gly, Val, Ileu; P1 = 3-6 amino acids; P2 = 2-4 amino acids; P3 = 6-10 amino acids; amino acids in P1, P2 and P3 being natural or synthetic, identical or different and P1, P2 and P3 having or not having a common sequence, the peptide having a β hairpin conformation where the β bend is formed by Ala or Glu-Gly or CDAsp or Ser or His or Asn-Xaak amino acid residues of its sequence). The peptides can be used for making a medicine, a vaccine, a chromatog. column and for screening.

IT 444585-61-9DP, derivs. 444585-72-2P 444889-95-6P
 RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (peptides with affinity for gp120 viral protein, and therapeutic and other use)

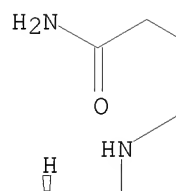
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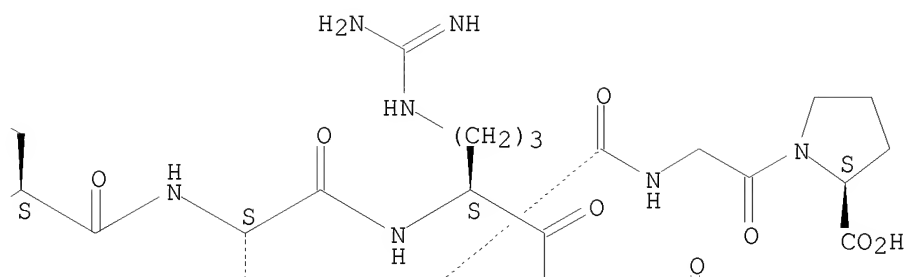
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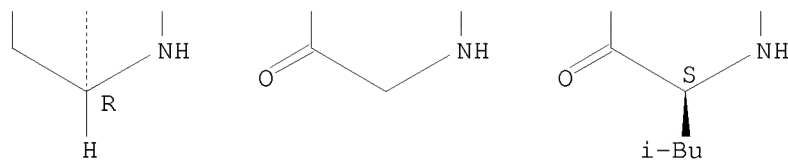
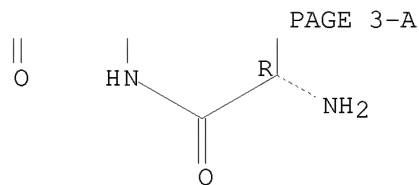
Absolute stereochemistry.

PAGE 1-A



PAGE 1-B





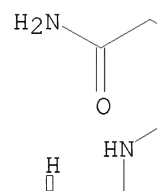
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 [(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-
 oxopentyl]amino]-1,3,6-trioxooctyl]-L-lysyl-L-seryl-L-leucylglycyl-L-
 leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-
 phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-, cyclic
 (1→18),(5→23),(9→25)-tris(disulfide) (9CI) (CA INDEX
 NAME)

NTE modified (modifications unspecified)

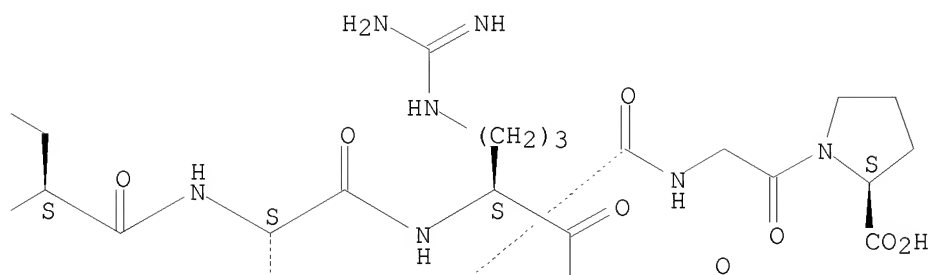
SEQ 1 XNLARCQLRC KSLGLLGKCA GSFCACGP

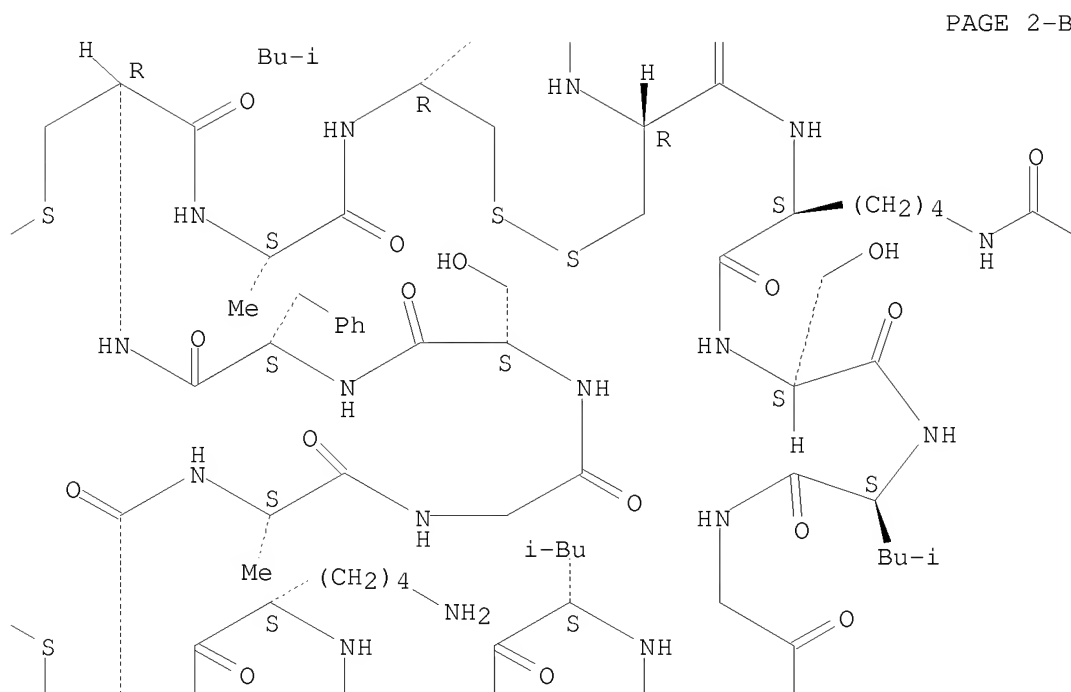
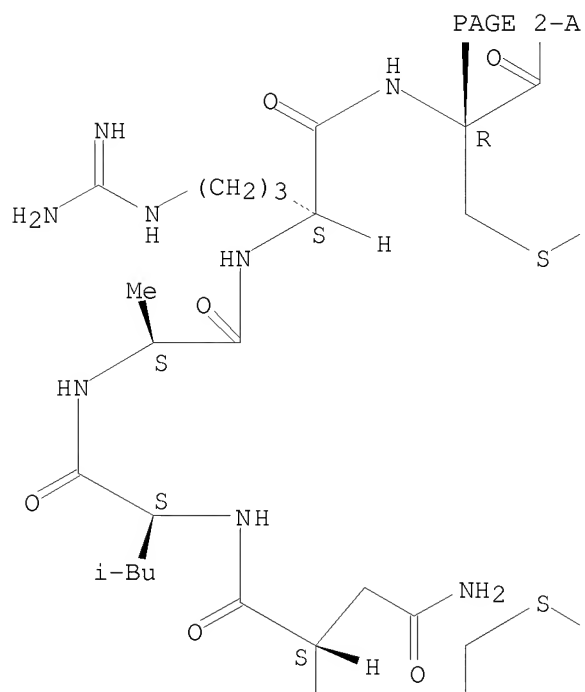
Absolute stereochemistry.

PAGE 1-A

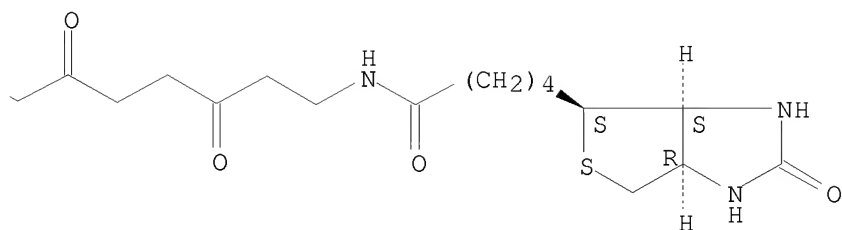


PAGE 1-B

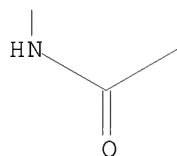




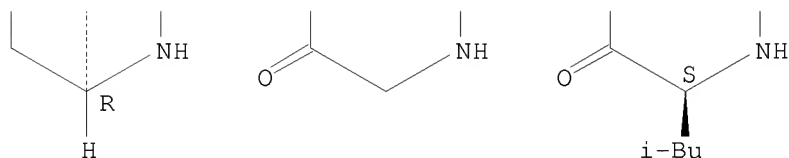
PAGE 2-C



PAGE 3-A



PAGE 3-B

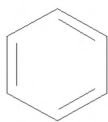


RN 444889-95-6 HCAPLUS
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NTE modified (modifications unspecified)

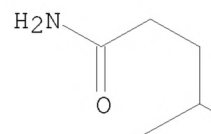
SEQ 1 XNLHFCQLRC KSLGLLGKCA GSFCACV

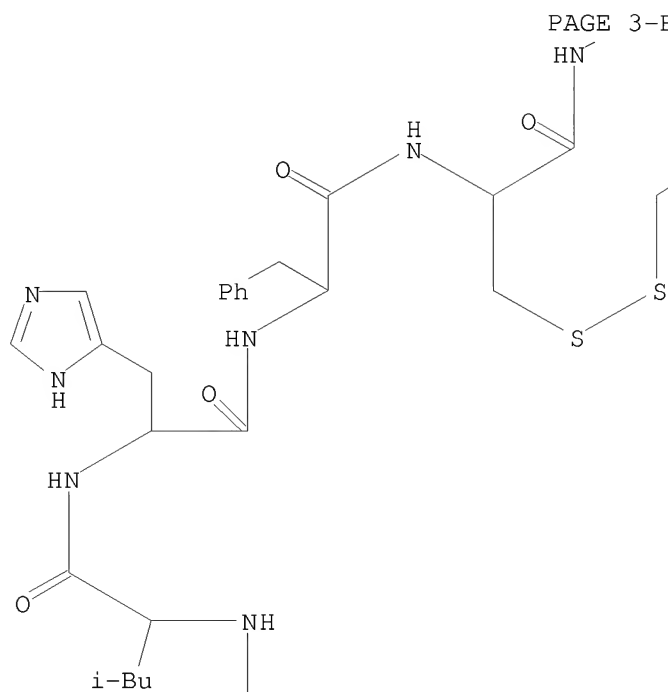
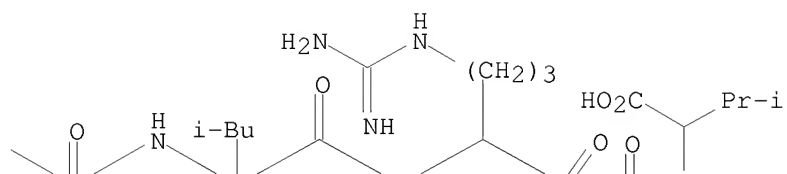
PAGE 1-A

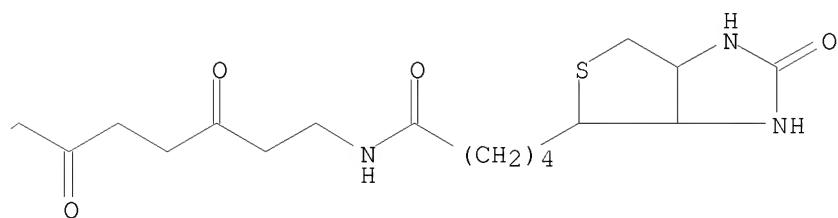
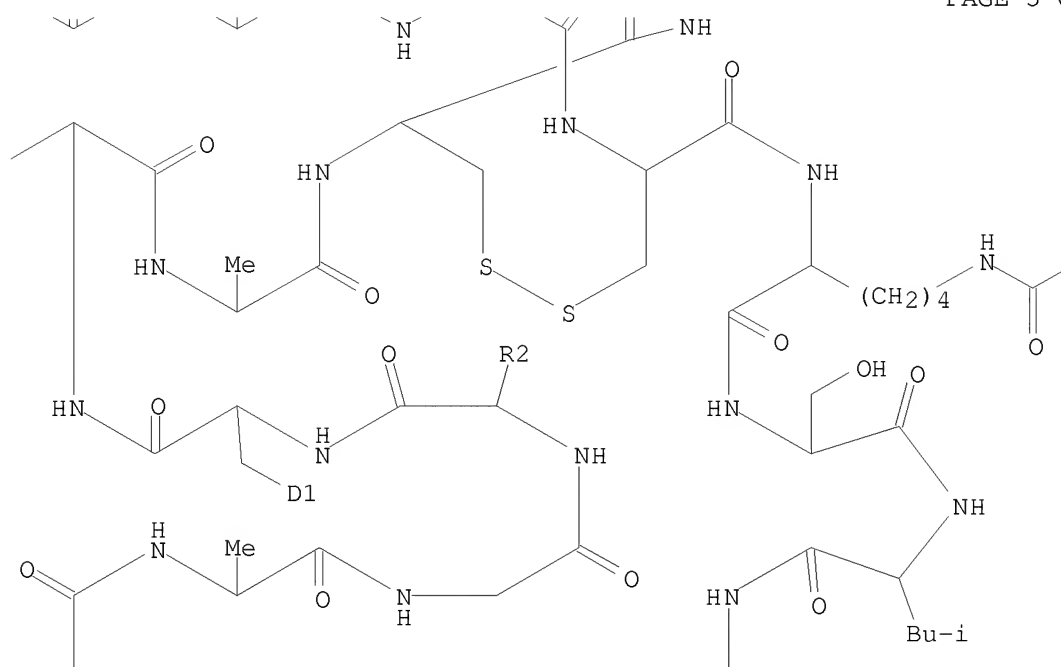


D1—Ph

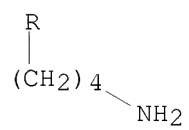
PAGE 2-B



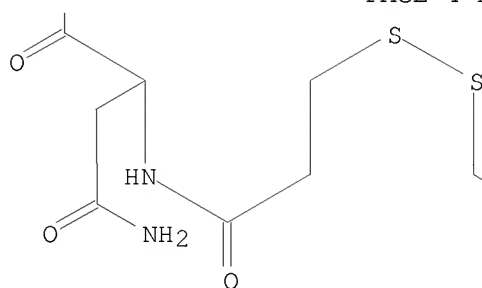




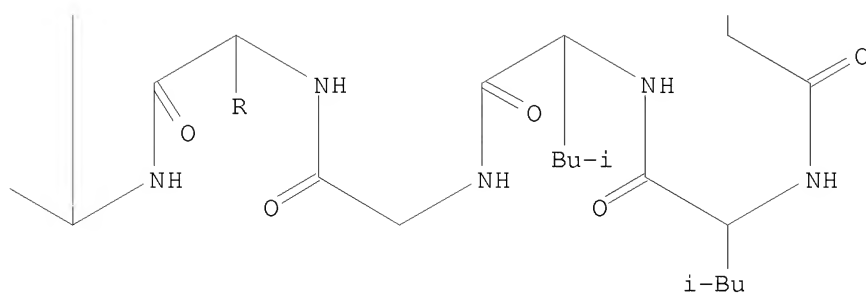
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444585-65-3P 444585-66-4P 444585-67-5P
444585-68-6P 444889-90-1P 444889-91-2P
444889-92-3P 444889-93-4P 445313-53-1P

RL: BUU (Biological use, unclassified); DGN (Diagnostic use); PAC
(Pharmacological activity); PRP (Properties); SPN (Synthetic preparation);
THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(peptides with affinity for gp120 viral protein, and therapeutic and
other use)

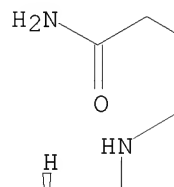
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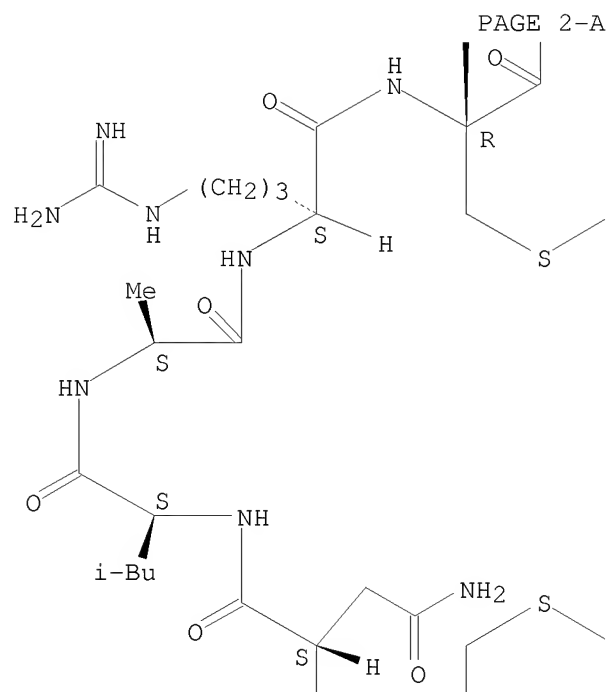
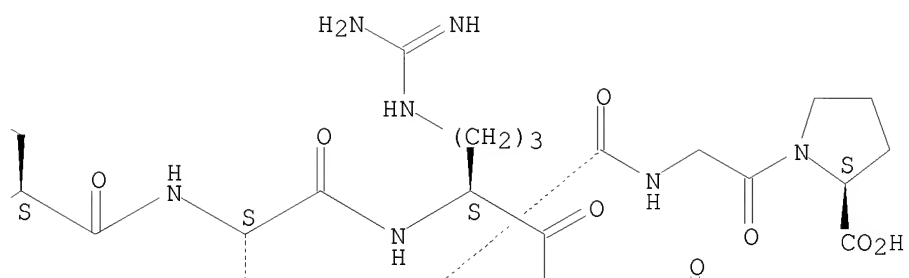
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arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-
seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-
alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-
, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI)
(CA INDEX NAME)

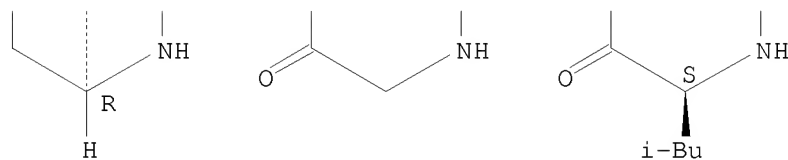
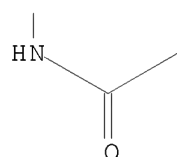
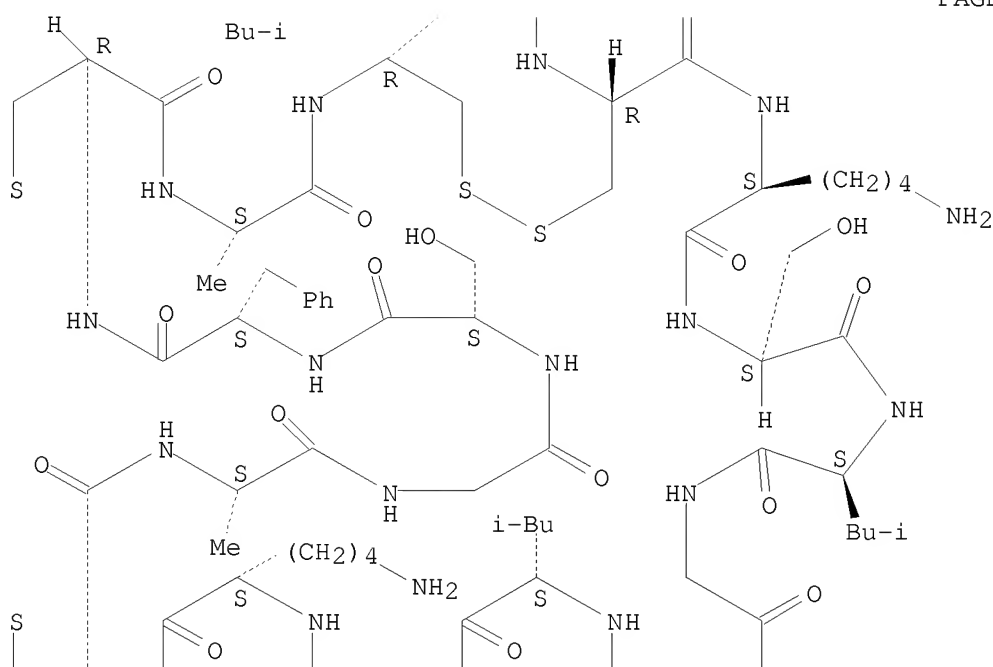
SEQ 1 XNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

PAGE 1-A





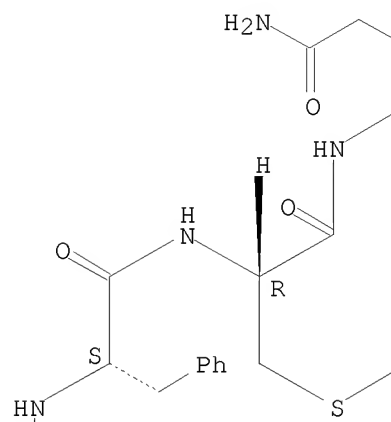


RN 444585-63-1 HCAPLUS
 CN L-Valine, N2-(3-mercapto-1-oxopropyl)-L-asparaginyl-L-leucyl-L-alanyl-L-phenylalanyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI)
 (CA INDEX NAME)

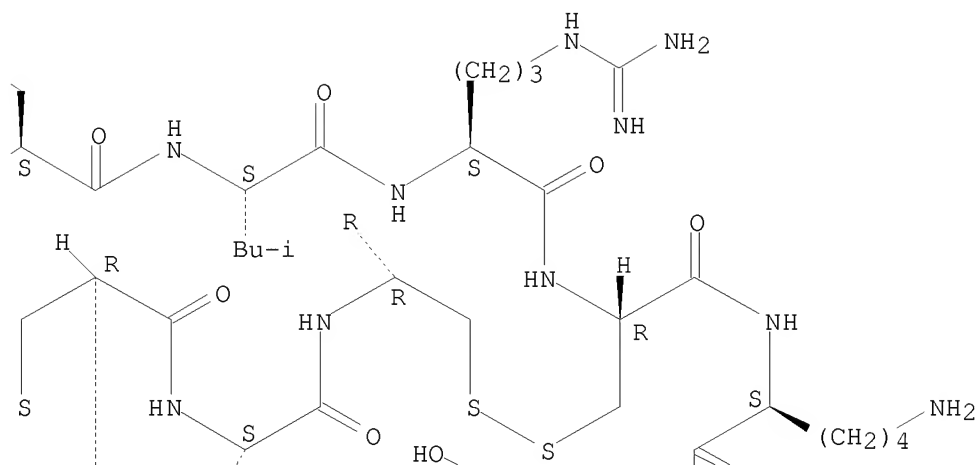
SEQ 1 XNLAFCQLRC KSLGLLGKCA GSFCACV

Absolute stereochemistry.

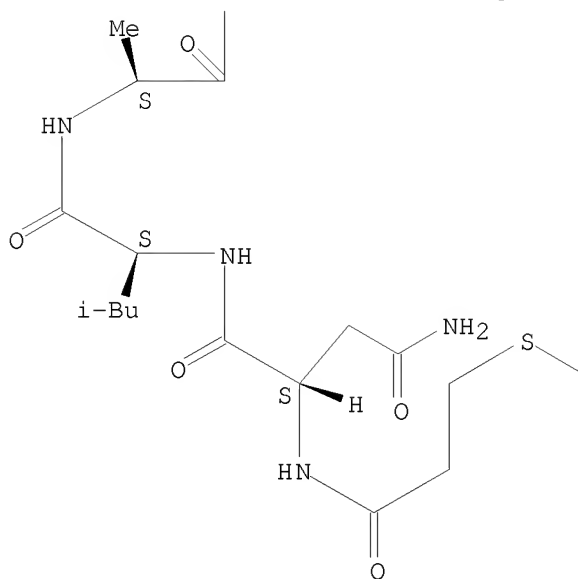
PAGE 1-A



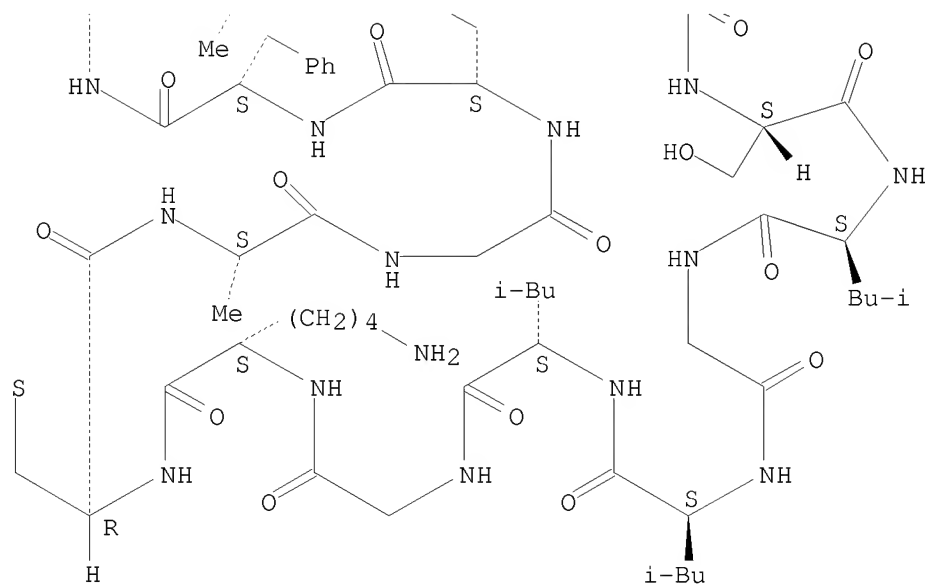
PAGE 1-B



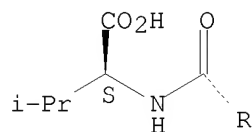
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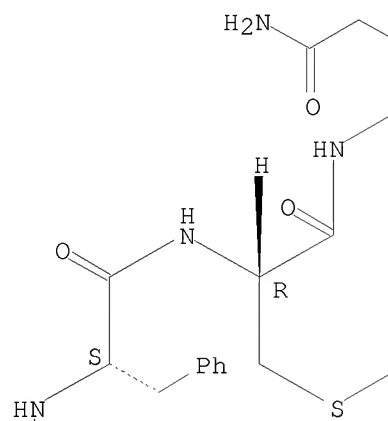
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lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanyl-L-seryl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI)
(CA INDEX NAME)

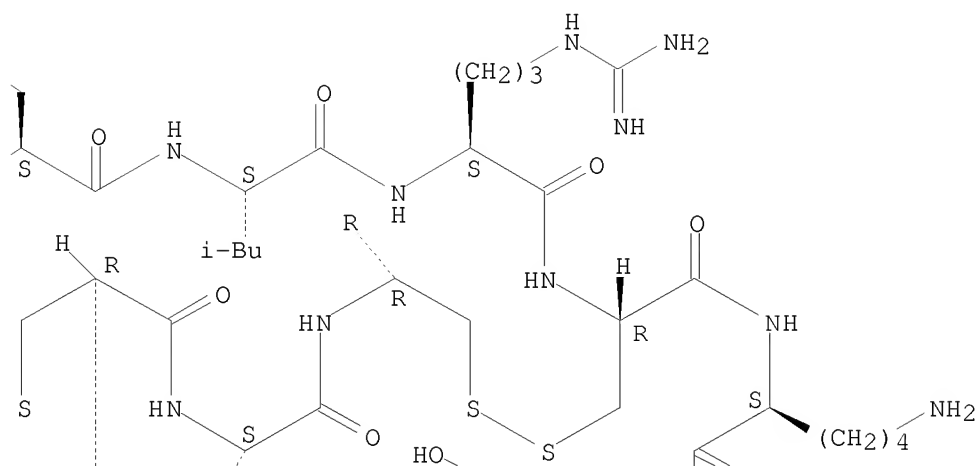
SEQ 1 XNLAFCQLRC KSLGLLGKCA SSFCACV

Absolute stereochemistry.

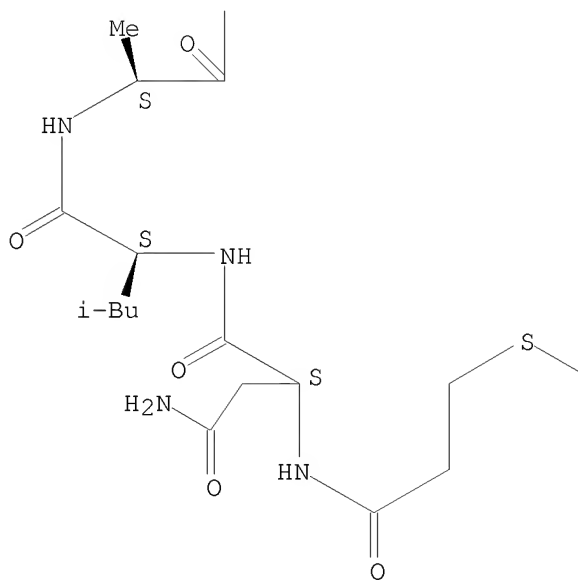
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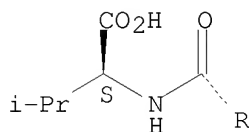
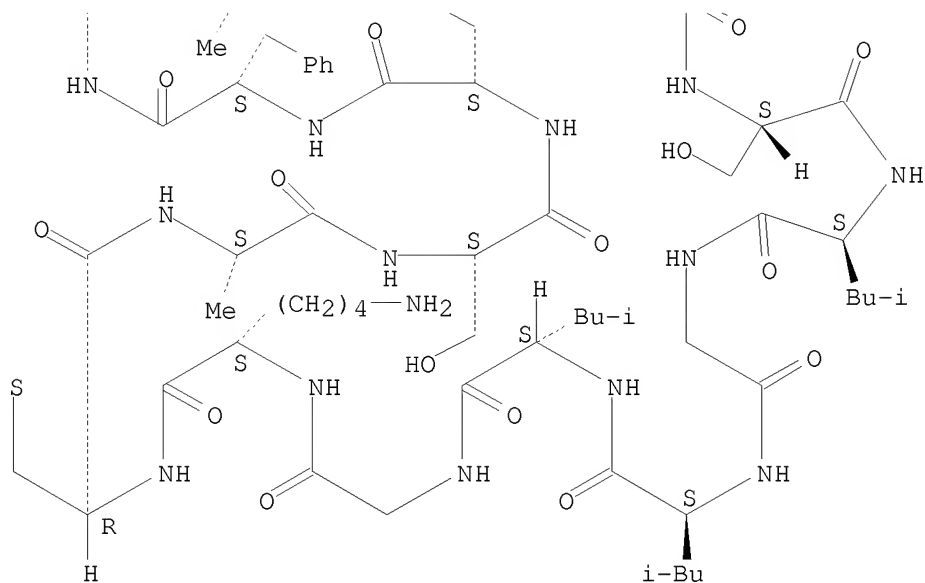


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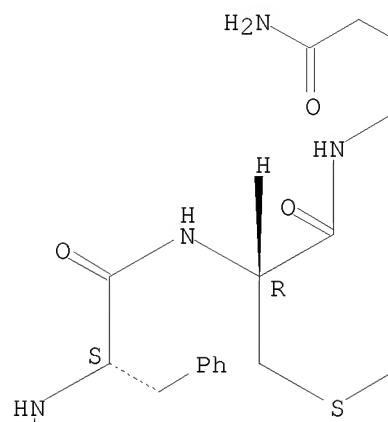


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 (CA INDEX NAME)

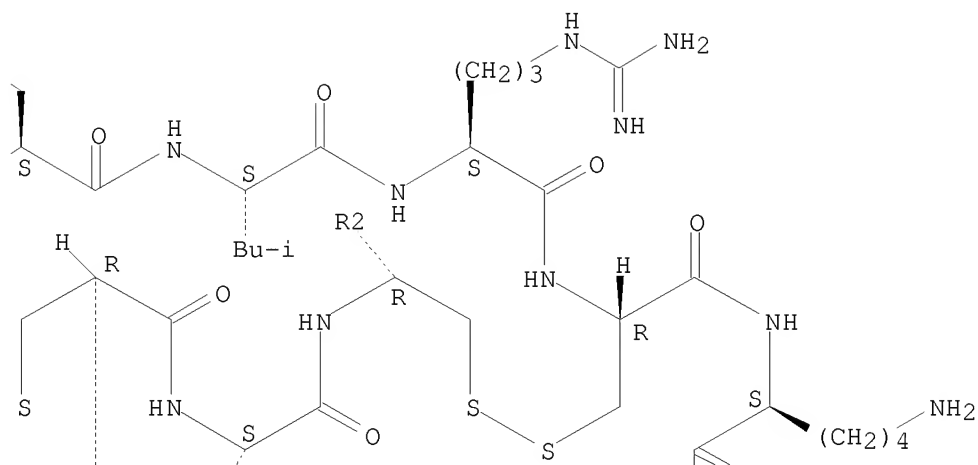
SEQ 1 XNLAFCQLRC KSLGLLGKCA GHFCACV

Absolute stereochemistry.

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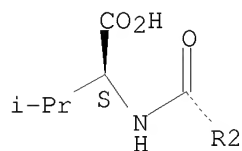
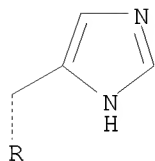


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CC(C)C[C@H](NC(=O)C(=O)NC(=O)C(=O)N)S(=O)(=O)C1=CC=C(C=C1)C(=O)N

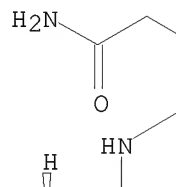
The figure displays 12 chemical structures of macrocyclic compounds, labeled 1 through 12. These structures are arranged in a grid-like fashion, with some structures (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12) shown in a 4x3 grid and structure 12 shown separately on the right. The structures are macrocyclic, meaning they are large ring molecules. They feature various functional groups, including amide bonds (NH, HN, C=O), thioether linkages (S), and different side chains (R, Me, Ph, i-Bu, (CH₂)₄NH₂, HOCH₂, Bu-i). The structures are drawn using standard chemical notation, with dashed lines indicating bonds to the R group and solid lines indicating bonds to the other substituents. The structures are numbered 1 through 12, with 12 being the last structure in the sequence.

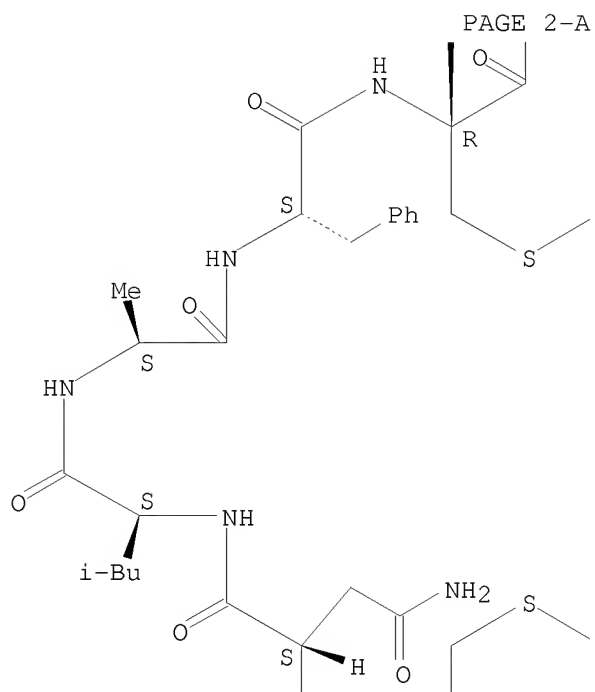
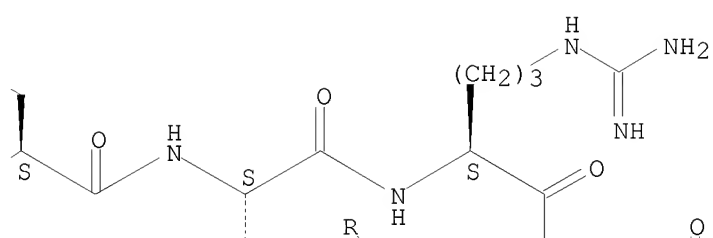


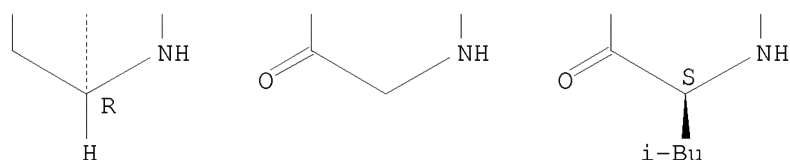
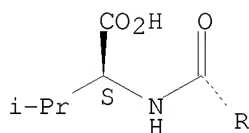
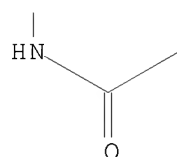
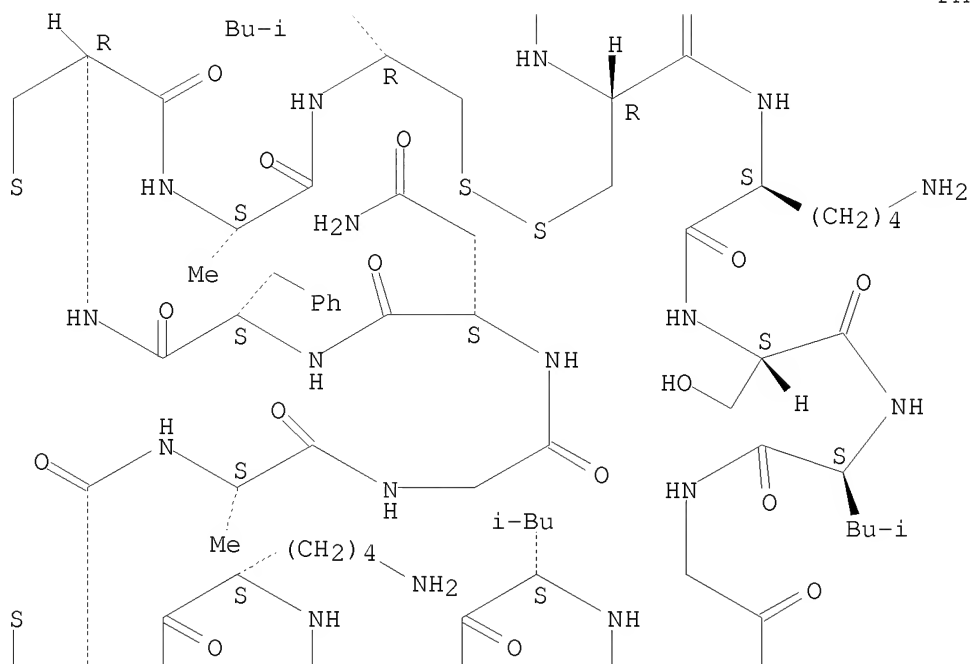
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 (CA INDEX NAME)

SEQ 1 XNLAFCQLRC KSLGLLGKCA GNFCACV

Absolute stereochemistry.







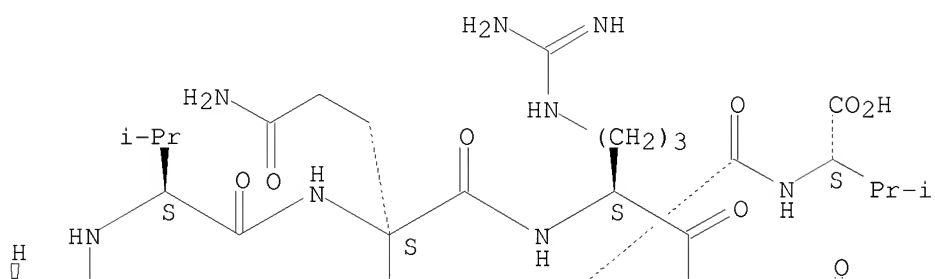
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(CA INDEX NAME)

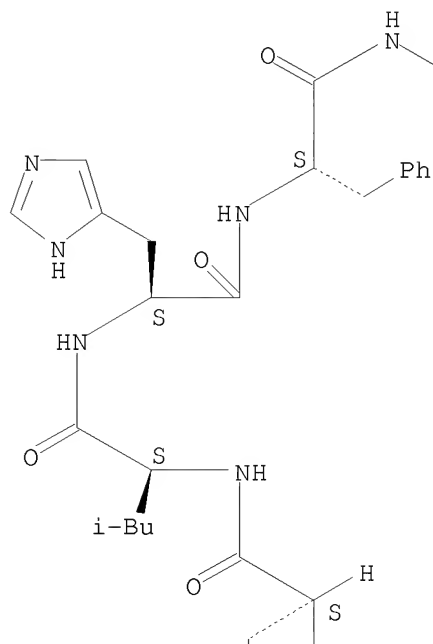
SEQ 1 XNLHFCVQRC HSLGKLGKCA GSFCACV

Absolute stereochemistry.

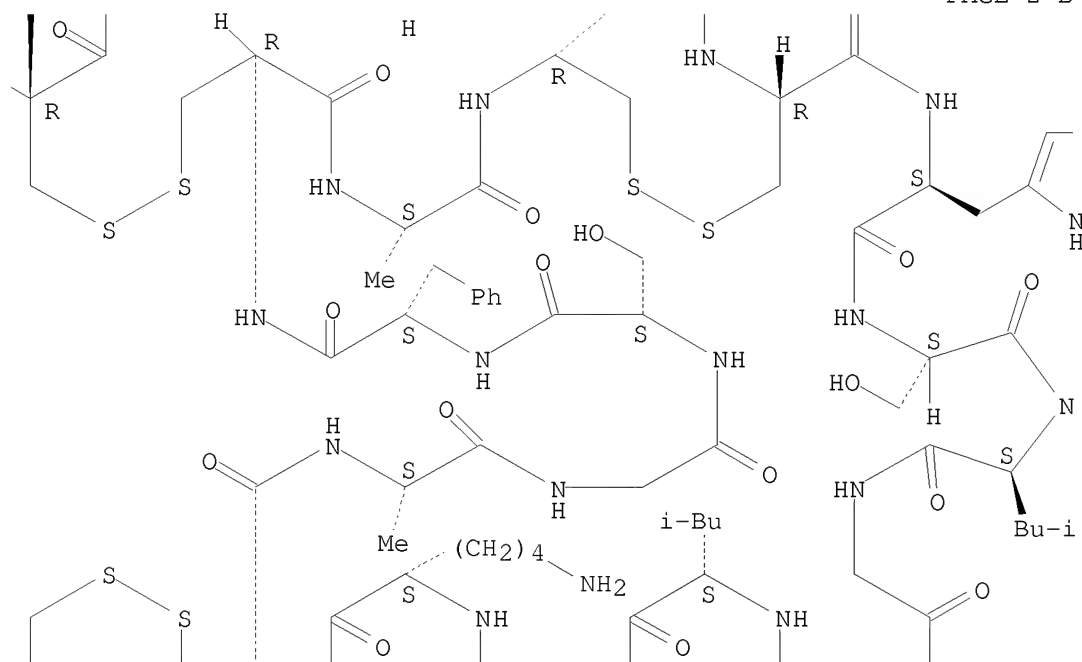
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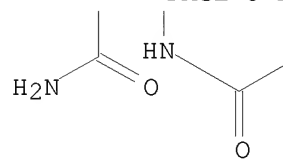


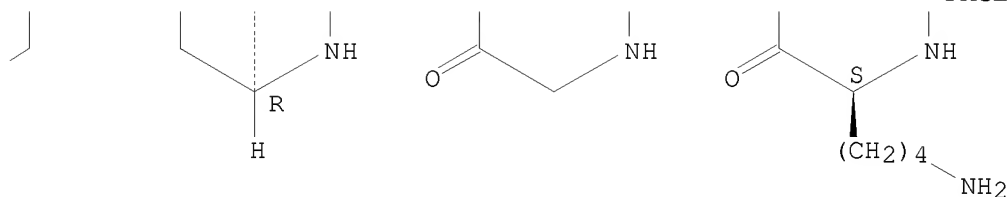
PAGE 2-C



H

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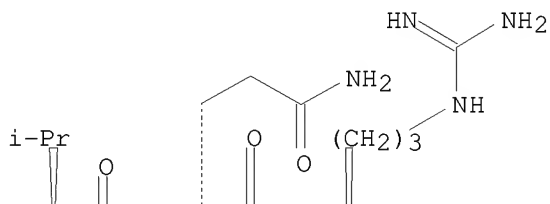


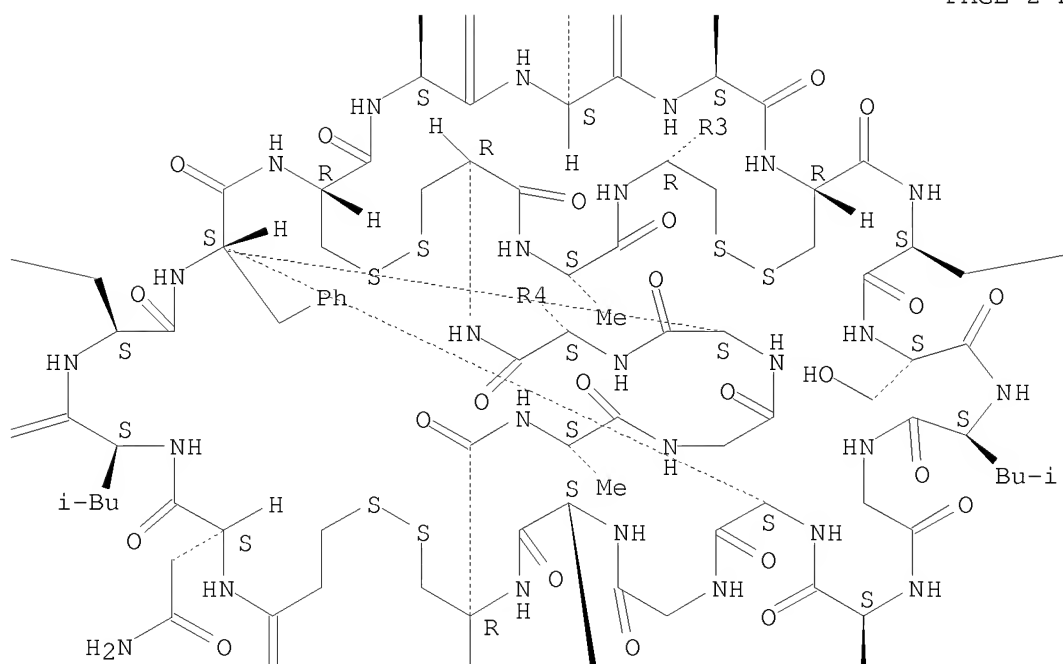
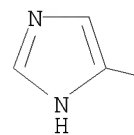
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(CA INDEX NAME)

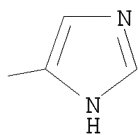
SEQ 1 XNLHFCVQRC HSLGLKGKCA GSFCACV

Absolute stereochemistry.

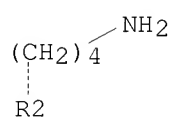
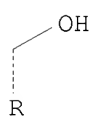




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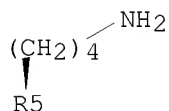
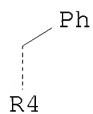
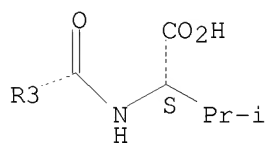


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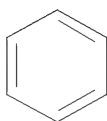




RN 444889-90-1 HCAPLUS
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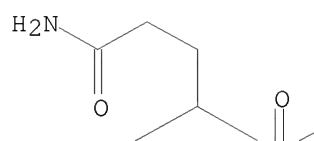
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SEQ 1 XNLQFCQLRC KSLGLLGKCA GSACACV

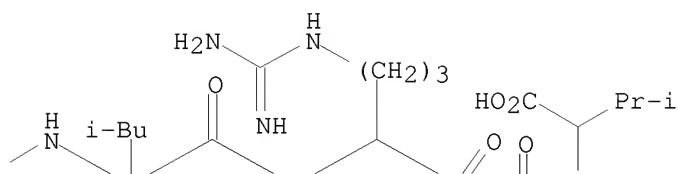


D1—Ph

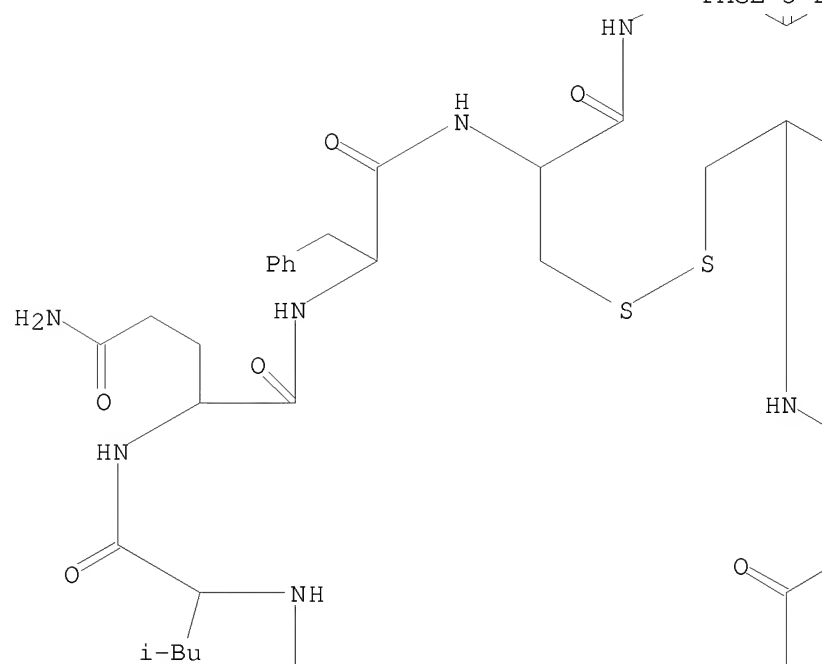
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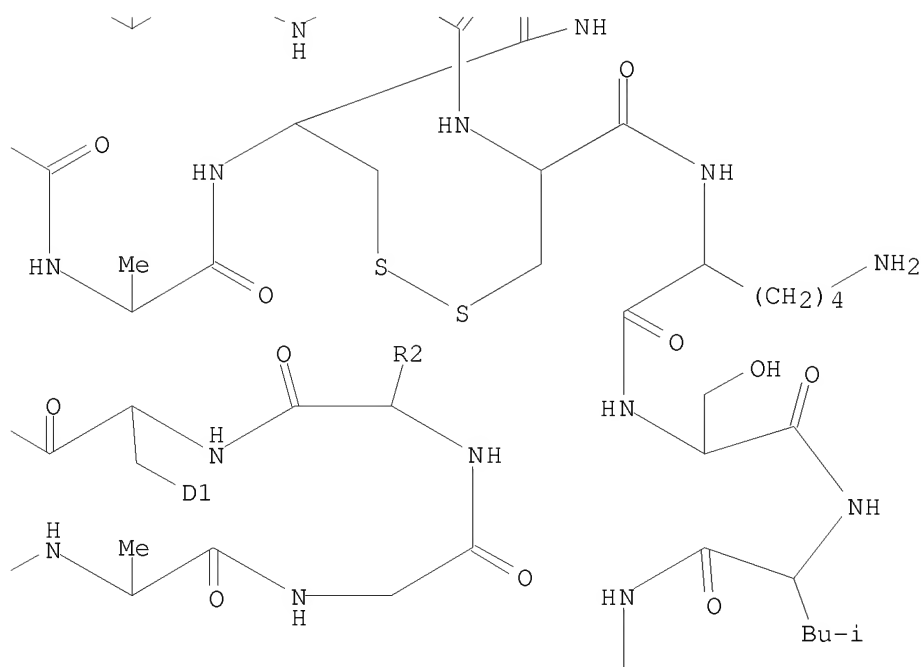
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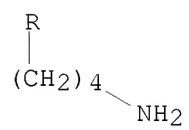
PAGE 3-B



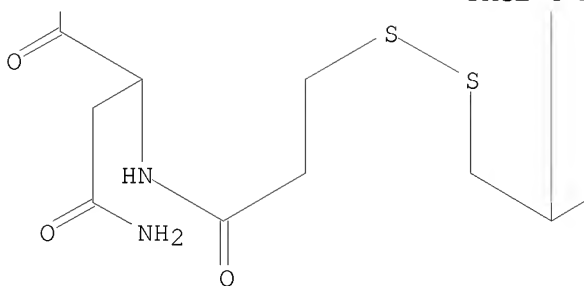
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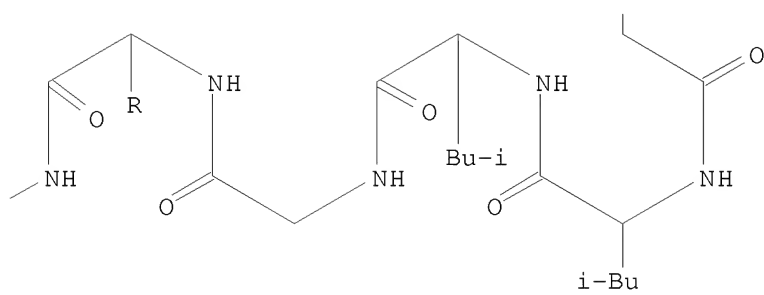
PAGE 4-A



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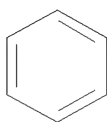


CN L-Valine, N2-(3-mercapto-1-oxopropyl)-L-asparaginyL-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-3-[1,1'-biphenyl]ylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

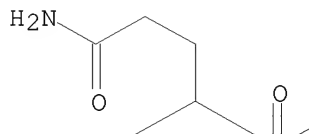
SEQ 1 XNLARCQLRC KSLGLLGKCA GSACACV

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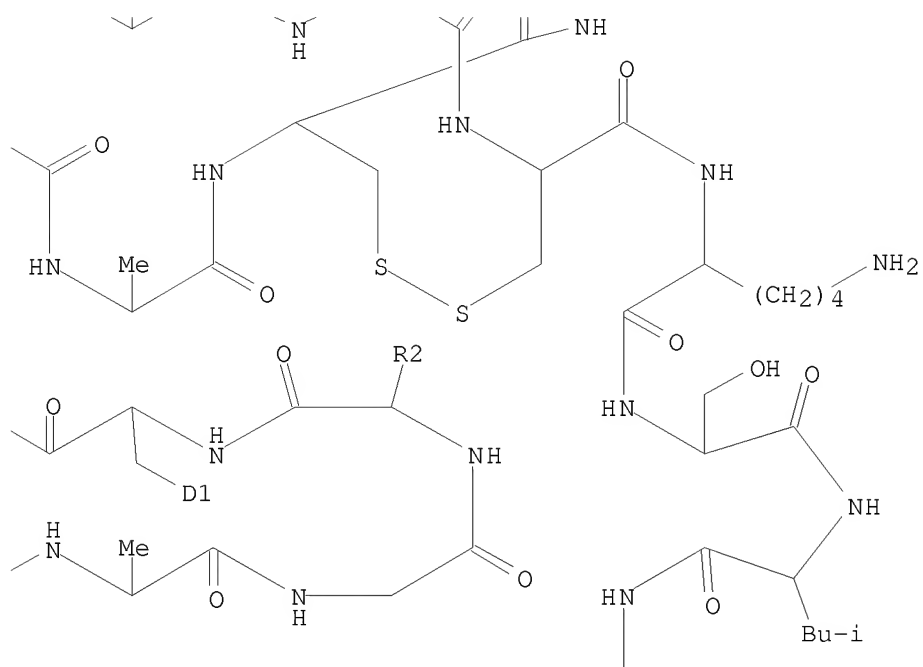


D1—Ph

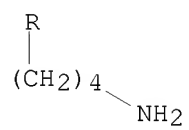
PAGE 2-B

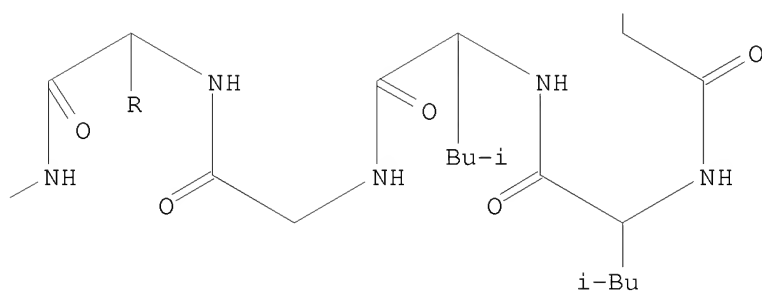
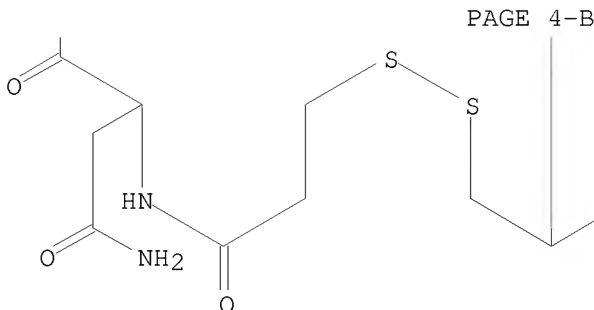


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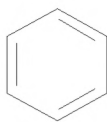


RN 444889-92-3 HCAPLUS
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NTE modified (modifications unspecified)

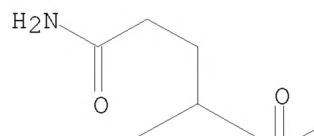
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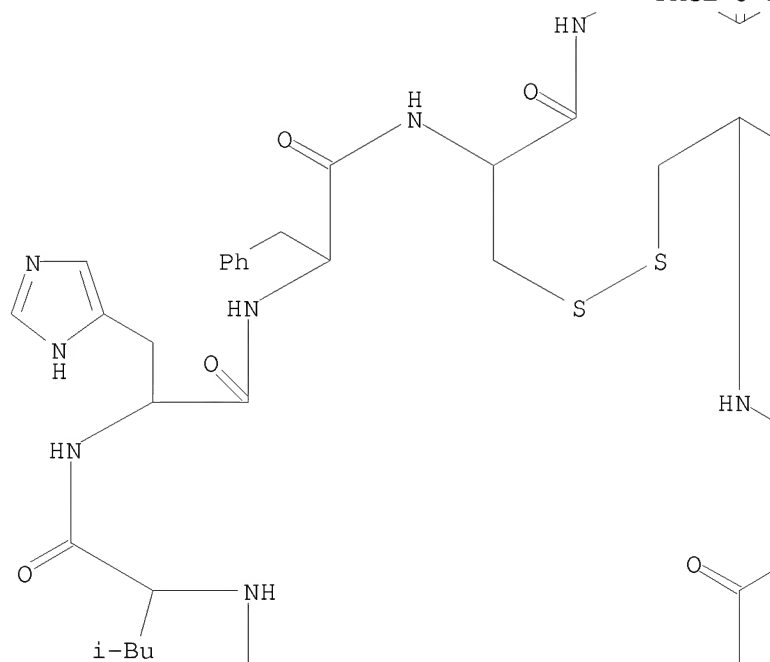
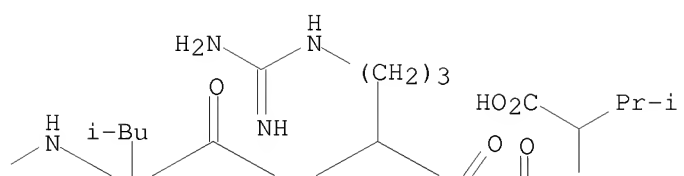
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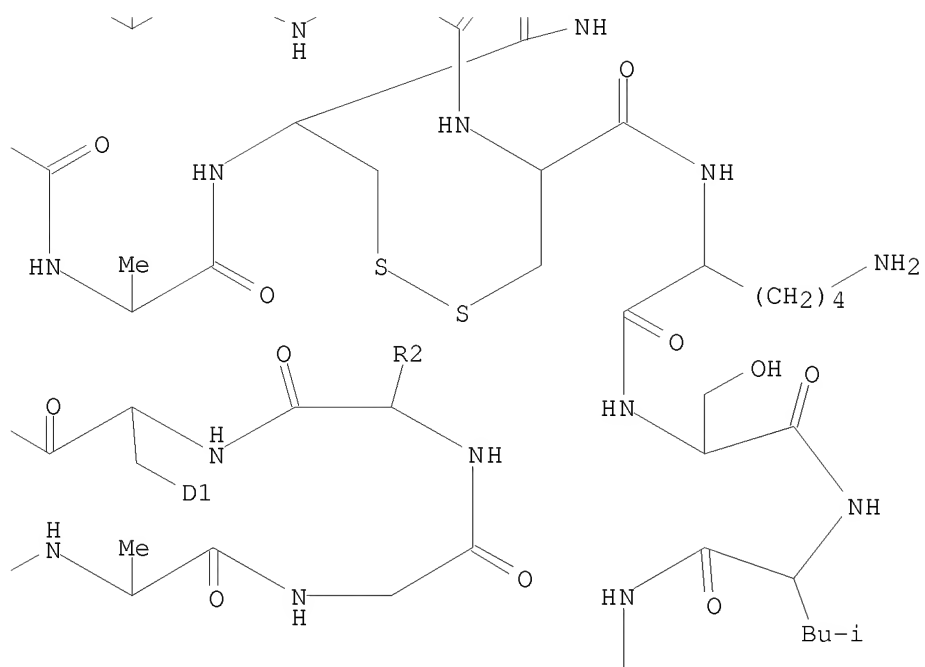
D1—Ph

PAGE 2-B

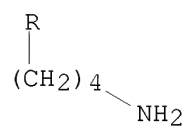


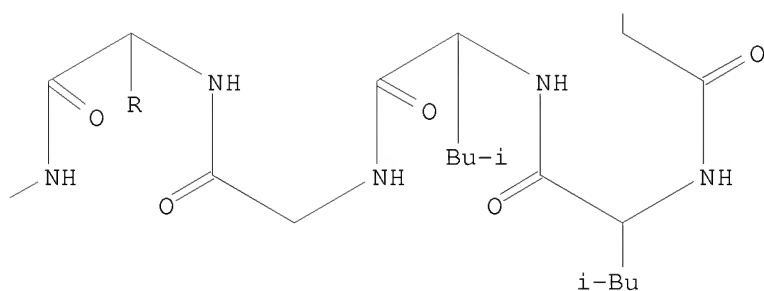
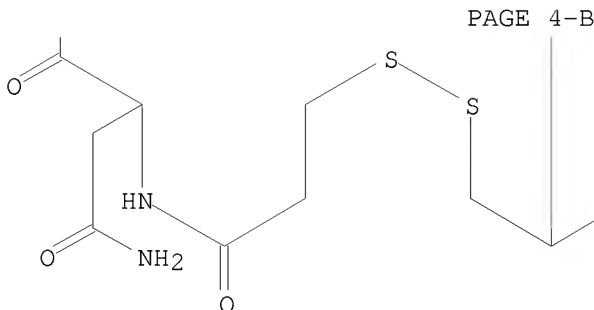


PAGE 3-C



PAGE 4-A



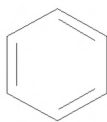


RN 444889-93-4 HCAPLUS
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NTE modified (modifications unspecified)

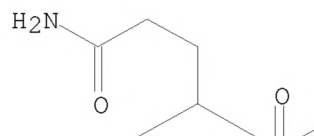
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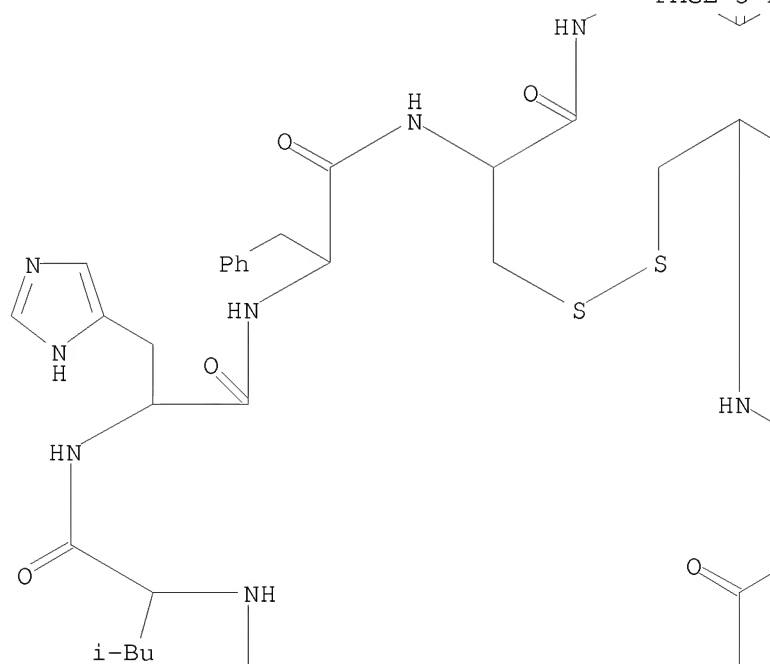
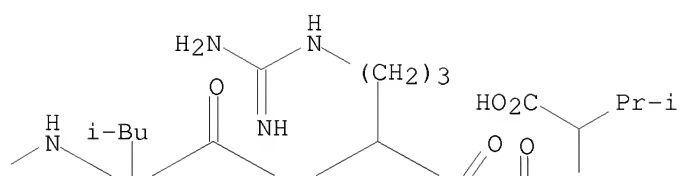
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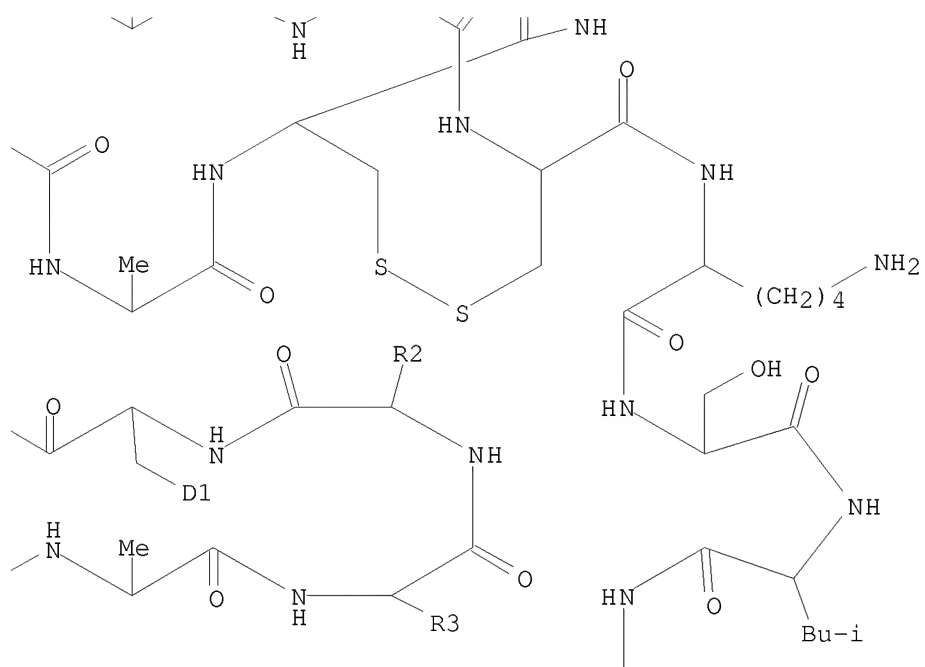
D1—Ph

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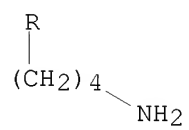


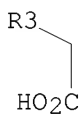
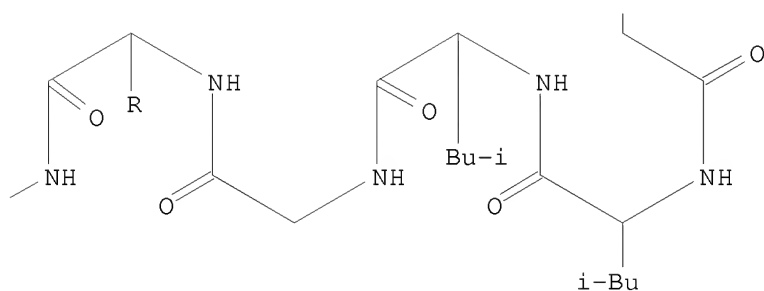
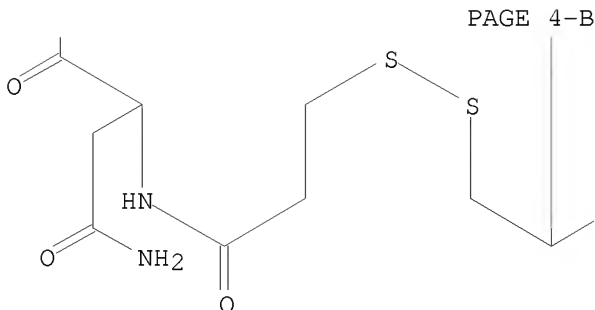


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RN 445313-53-1 HCAPLUS
 CN Peptide, (Mpa-Asn-Leu-His-Phe-Cys-Val-Gln-Arg-Cys-His-Ser-Leu-Gly-Leu-Leu-Gly-Lys-Cys-Ala-Gly-Ser-Xaa-Cys-Ala-Cys-Val) (9CI) (CA INDEX NAME)

SEQ 1 XNLHFCVQRC HSLGLLGKCA GSXCACV

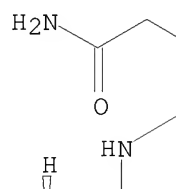
IT 444585-61-9P 444585-67-5DP, fluorescein derivs.
 444585-68-6DP, fluorescein derivs. 444585-70-0P
 444585-71-1P 444889-92-3DP, fluorescein derivs.
 444889-94-5P
 RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (peptides with affinity for gp120 viral protein, and therapeutic and

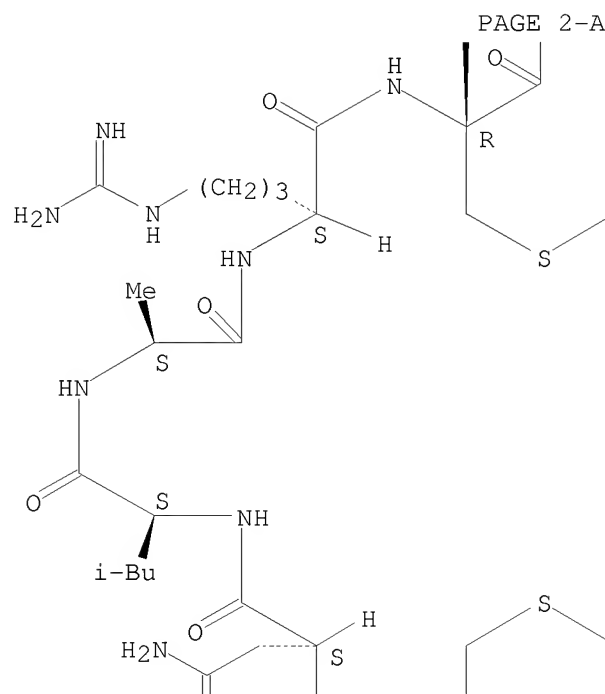
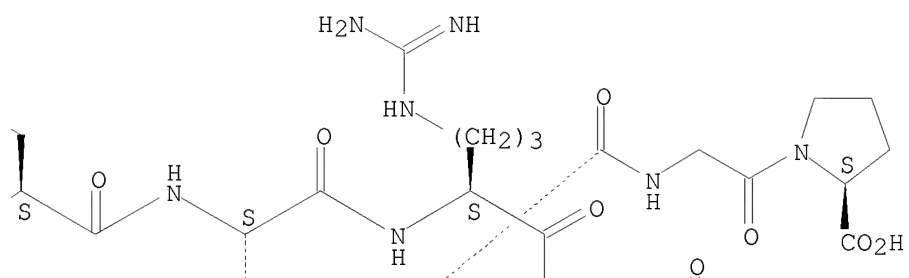
other use)
 RN 444585-61-9 HCAPLUS
 CN L-Proline, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl-, cyclic (1→19), (6→24), (10→26)-tris(disulfide) (9CI) (CA INDEX NAME)

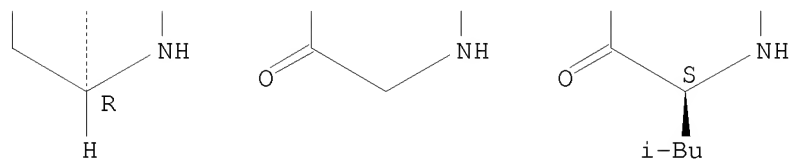
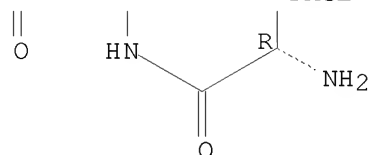
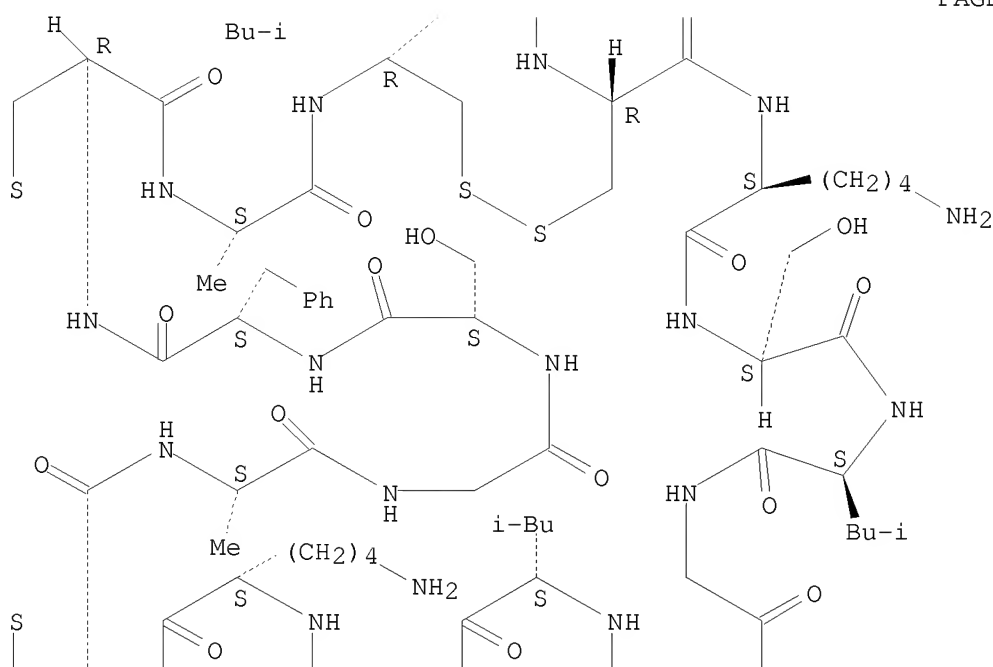
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

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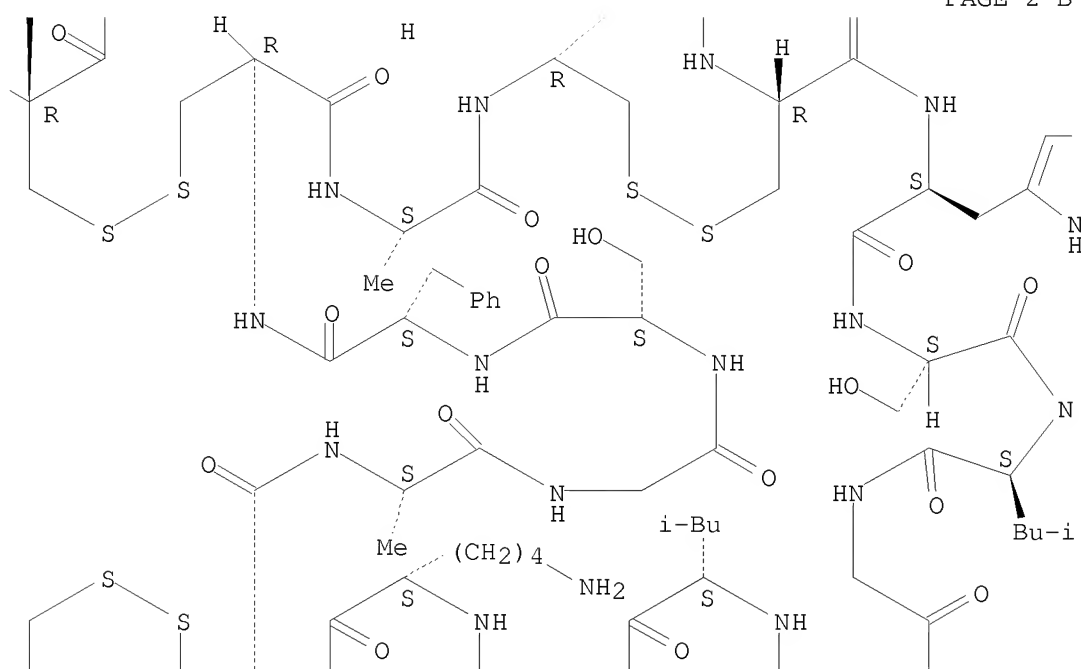


RN 444585-67-5 HCAPLUS

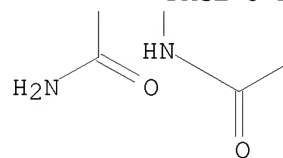
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(CA INDEX NAME)

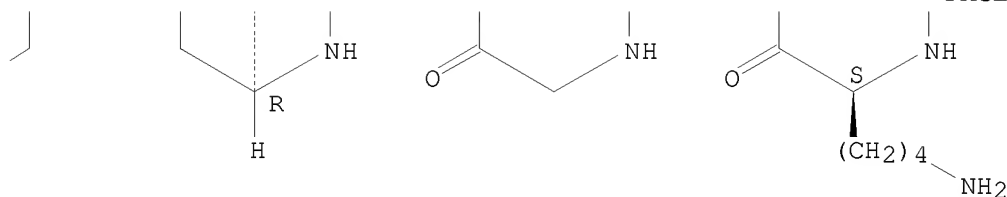
SEQ 1 XNLHFCVQRC HSLGKLGKCA GSFCACV

Absolute stereochemistry.



H



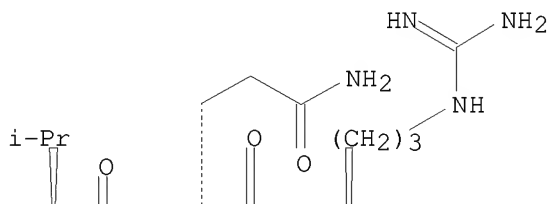


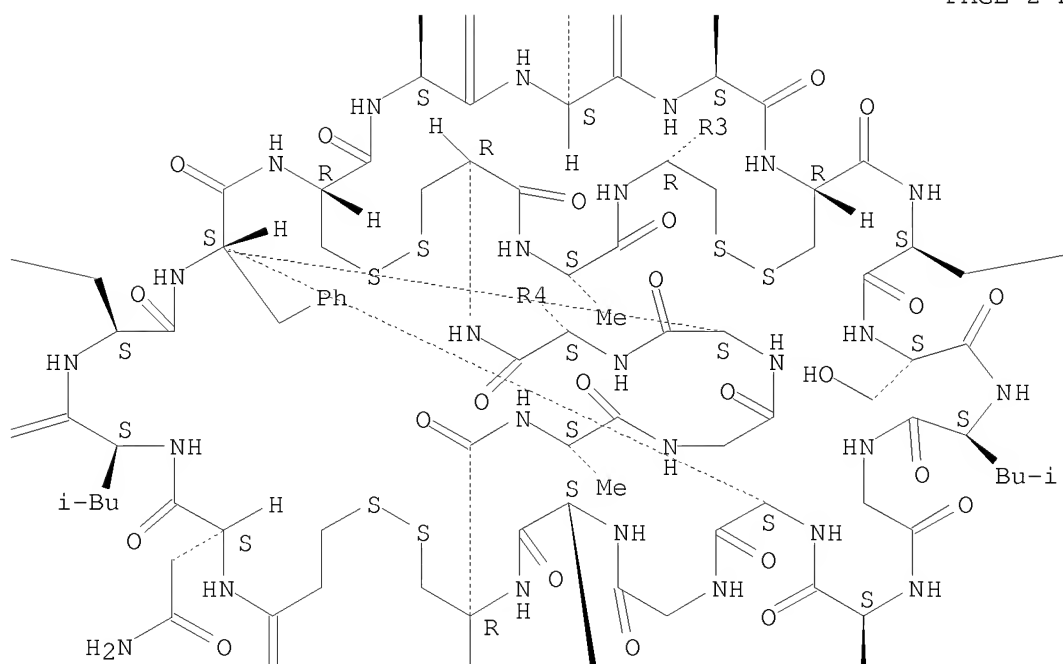
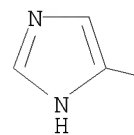
RN 444585-68-6 HCAPLUS

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(CA INDEX NAME)

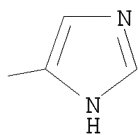
SEQ 1 XNLHFCVQRC HSLGLKGKCA GSFCACV

Absolute stereochemistry.

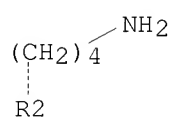
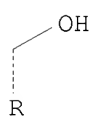




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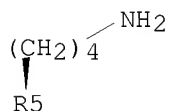
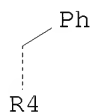
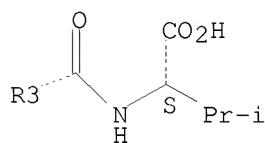


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PAGE 3-B



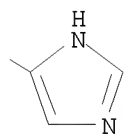
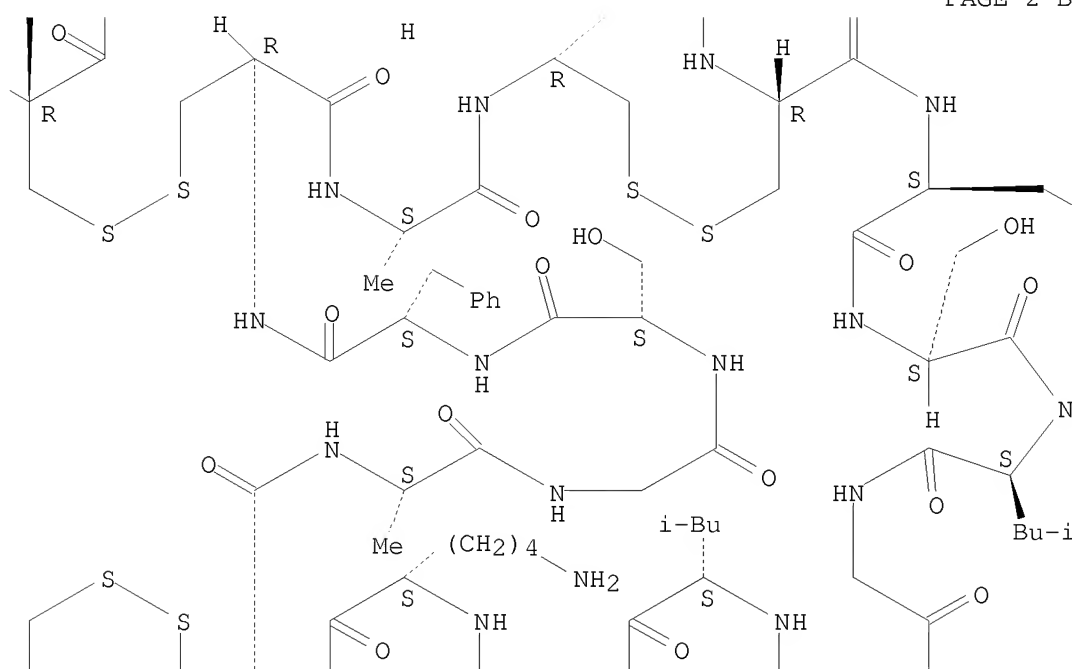


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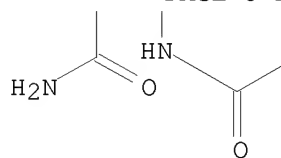
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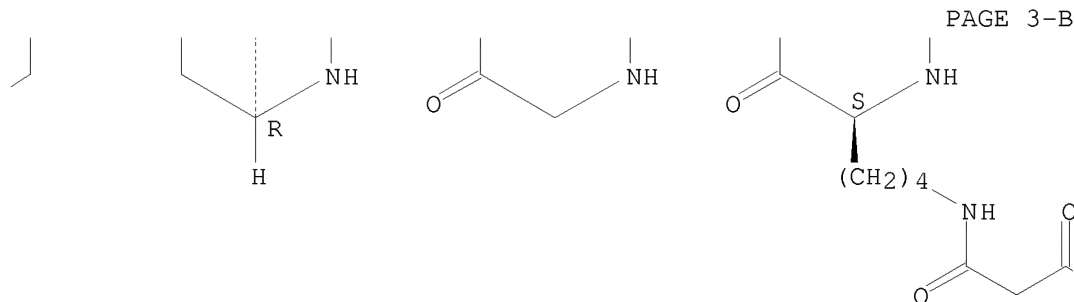
SEQ 1 XNLHFCVQRC HSLGKLGKCA GSFCACV

Absolute stereochemistry.

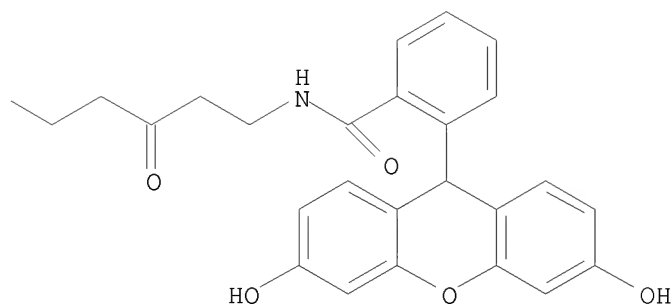


H





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RN 444585-71-1 HCAPLUS
 CN L-Valine, N2-(3-mercaptopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-valyl-L-glutaminyl-L-arginyl-L-cysteinyl-L-histidyl-L-seryl-L-leucylglycyl-L-leucyl-N6-[8-[[2-(3,6-dihydroxy-9H-xanthen-9-yl)benzoyl]amino]-1,3,6-trioxooctyl]-L-lysylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 XNLHFCVQRC HSLGLKGKCA GSFCACV

RN 444889-92-3 HCAPLUS
 CN L-Valine, N2-(3-mercaptopropyl)-L-asparaginyl-L-leucyl-L-histidyl-L-phenylalanyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-3-[1,1'-biphenyl]ylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl-, cyclic (1→18), (5→23), (9→25)-tris(disulfide) (9CI) (CA INDEX NAME)

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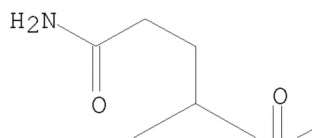
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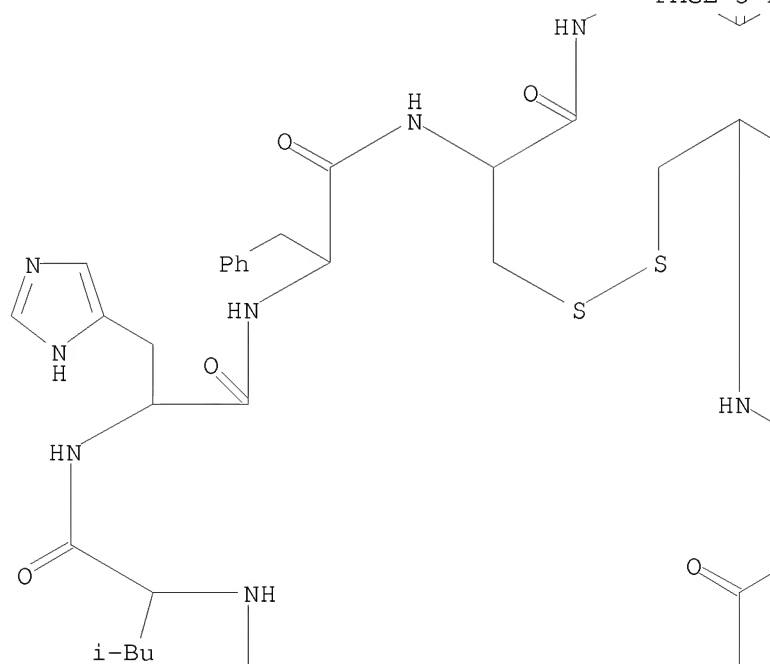
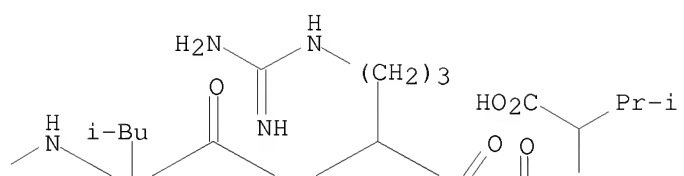
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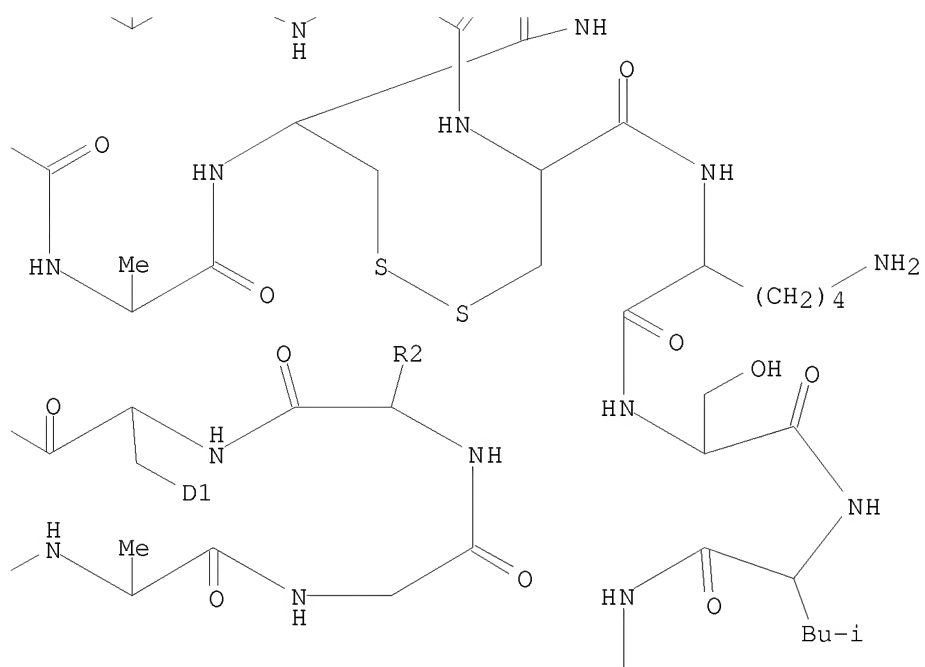
D1—Ph

PAGE 2-B

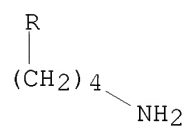


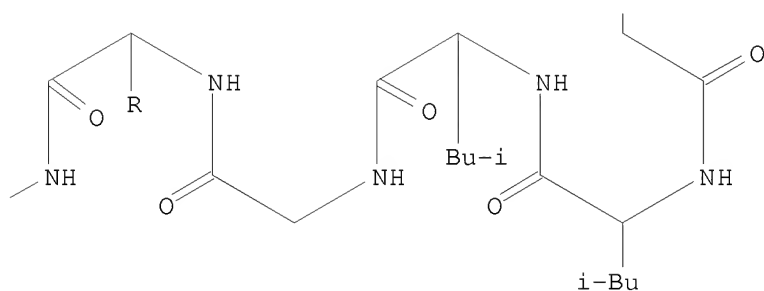
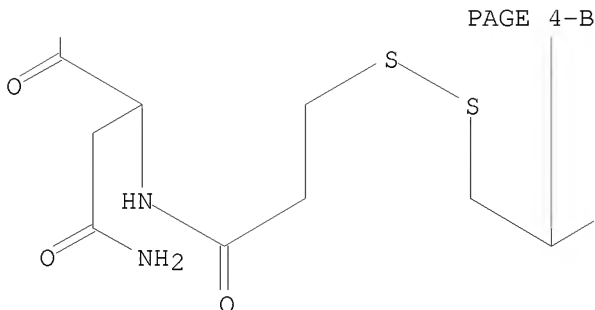


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RN 444889-94-5 HCAPLUS
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NTE modified (modifications unspecified)

SEQ 1 XNLHFCQLRC KSLGLLGKCA GSACACV

L4 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:348211 HCAPLUS

DOCUMENT NUMBER: 137:77763

TITLE: β -Turn Phe in HIV-1 Env Binding Site of CD4 and CD4 Mimetic Miniprotein Enhances Env Binding Affinity but Is Not Required for Activation of Co-Receptor/17b Site

AUTHOR(S): Dowd, Cynthia S.; Leavitt, Stephanie; Babcock, Gregory; Godillot, Alexis P.; Van Ryk, Don; Canziani, Gabriela A.; Sodroski, Joseph; Freire, Ernesto; Chaiken, Irwin M.
CORPORATE SOURCE: Department of Medicine, University of Pennsylvania, Philadelphia, PA, 19104, USA
SOURCE: Biochemistry (2002), 41(22), 7038-7046
CODEN: BICHAW; ISSN: 0006-2960
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB HIV-1 enters a host cell after an initial interaction between viral envelope glycoprotein gp120 and cell surface receptor CD4, followed by a second interaction between gp120 and a cell surface chemokine receptor. CD4 residue Phe43 makes a significant contribution to the high-affinity interaction between CD4 and env. We and others have used scorpion toxin scaffolds to display and examine CD4 epitopes used for gp120 recognition. These peptides, which have a β -turn Phe that acts as a Phe43 surrogate, compete with CD4 for gp120 binding and enhance the binding of gp120 to 17b, an antibody that binds near the co-receptor-binding site. In the current study, a scyllatoxin-scaffolded peptide, identified via phage epitope randomization and lacking a β -turn Phe (indeed, containing no aromatic residues), was shown to behave in a distinctly CD4-like manner. This peptide, denoted [20EGLV23]ST, not only competed with CD4 for gp120 binding, but also enhanced the binding of gp120 to 17b. Quant., an [20EGLV23]ST-gp120 complex exhibited the same 17b binding on-rate as a complex of gp120 with [20AGSF23]ST, a scyllatoxin-based CD4 mimetic peptide containing a β -turn Phe. In view of this result, we examined the role of Phe43 in CD4 itself by comparing F43V D1D2 sCD4 vs. D1D2 sCD4. Like the peptides, a close similarity was observed for both Phe43 and Phe43-less D1D2 sCD4s in enhancing gp120 binding to 17b. Further, when examined for their ability to enhance binding of gp120 to CCR5+ cells, [20EGLV23]ST and [20AGSF23]ST were found to have the same efficacy, after correcting for the difference in their gp120 affinities. These results show that, although Phe43 is important in maintaining high affinity in gp120 ligands, the aromatic residue is not necessary for triggering the conformational isomerization in gp120 that results in formation or exposure of the binding sites for the 17b antibody and the CCR5 receptor.

IT 441018-23-1

RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
(β -turn Phe in HIV-1 env binding site of CD4 and CD4 mimetic miniprotein enhances env binding affinity but is not required for activation of co-receptor/17b site)

RN 441018-23-1 HCAPLUS

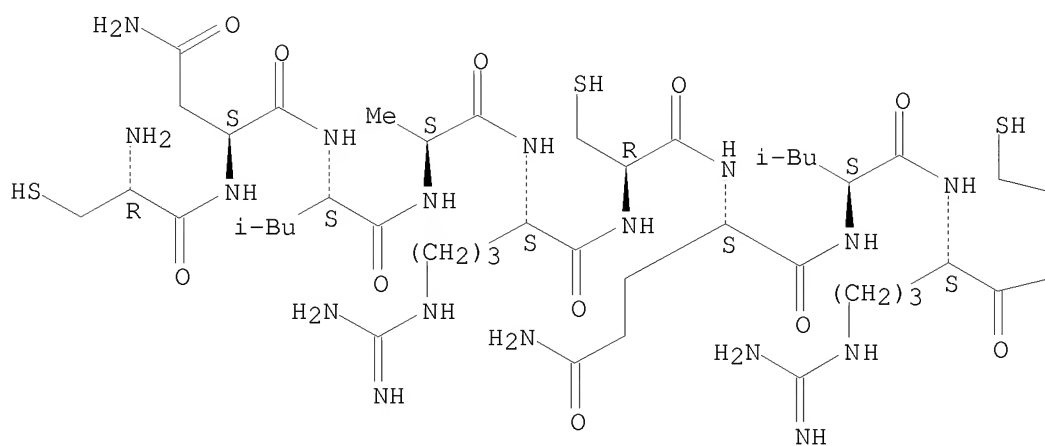
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NTE modified

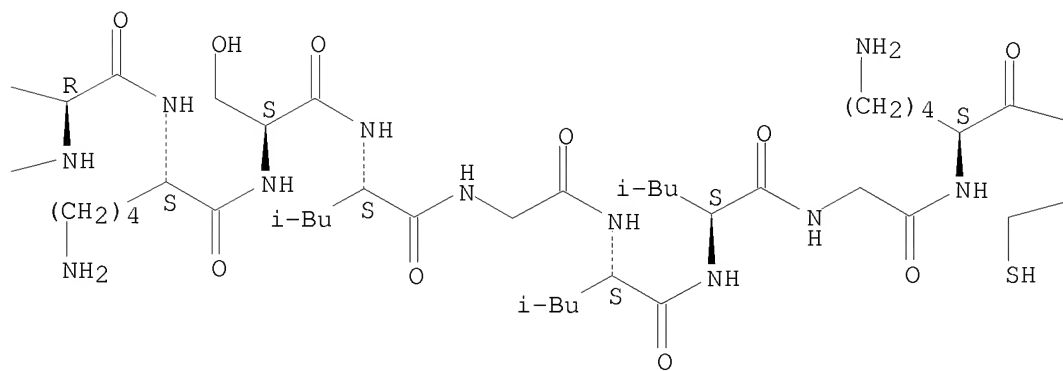
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

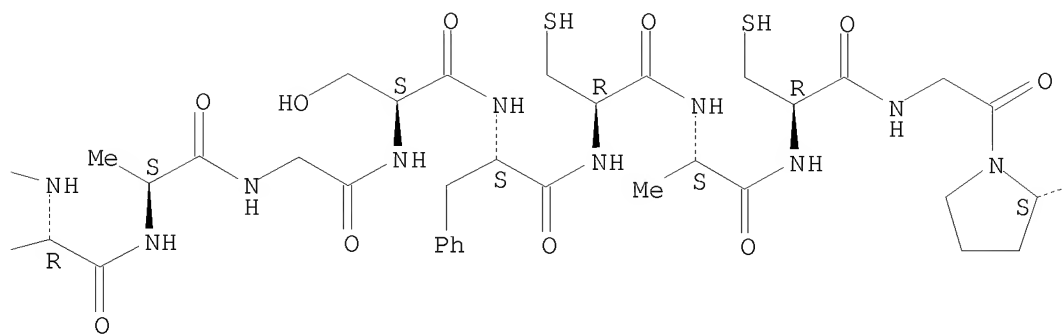
PAGE 1-A

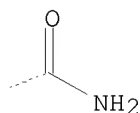


PAGE 1-B



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REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:832480 HCAPLUS

DOCUMENT NUMBER: 134:175181

TITLE: Engineering novel bioactive mini-proteins on natural scaffolds

AUTHOR(S): Martin, L.; Barthe, P.; Combes, O.; Roumestand, C.; Vita, C.

CORPORATE SOURCE: Departement d'Ingenierie et d'Etudes des Proteines, CEA, Gif-sur-Yvette, 91190, Fr.

SOURCE: Tetrahedron (2000), 56(48), 9451-9460

CODEN: TETRAB; ISSN: 0040-4020

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Novel bioactive mini-proteins have been engineered by a rational approach, implying the structural and functional reproduction of protein binding sites on stable natural protein structures, functioning as scaffolds. Such mols., possessing a well-defined three-dimensional structure and a specific biol. activity, represent new tools in biol., biotechnol., medical sciences, and also precious intermediates useful in drug design, facilitating the conversion of a protein functional epitope into a classical pharmaceutical.

IT 326494-27-3 326494-28-4

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(engineering bioactive mini-proteins on scaffolds as tools in biochem. and drug design)

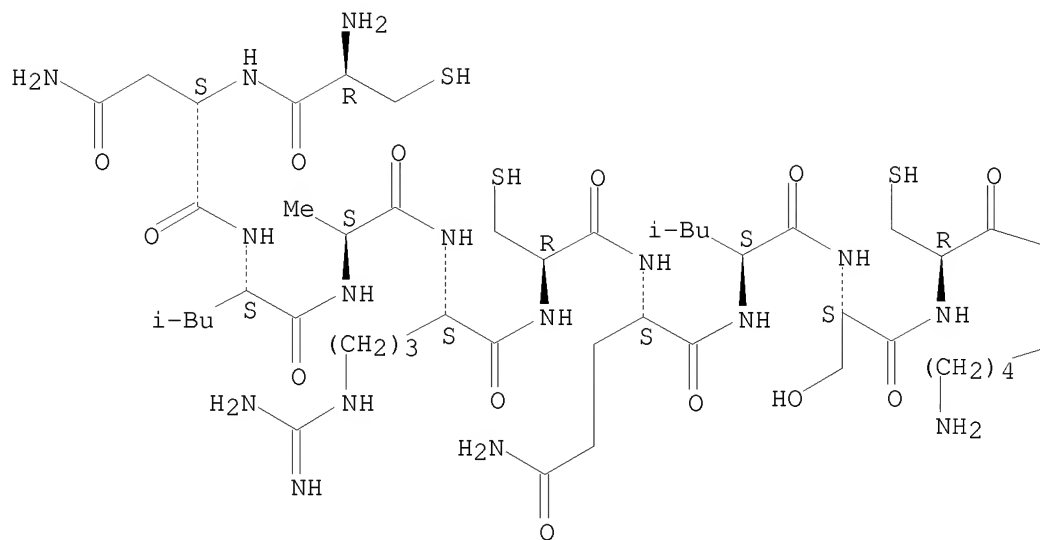
RN 326494-27-3 HCAPLUS

CN Glycine, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutamyl-L-leucyl-L-seryl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-lysylglycylglycyl-L-cysteinyl-L-alanyl-L-alanyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinyl- (9CI) (CA INDEX NAME)

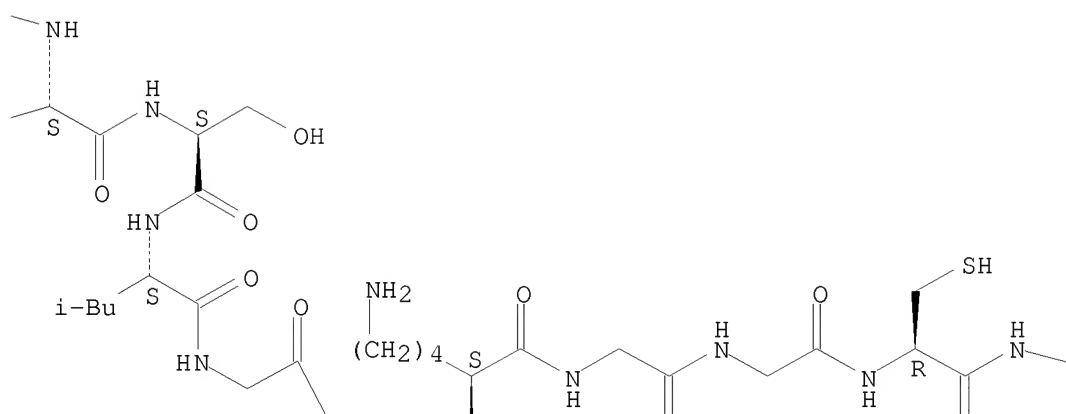
SEQ 1 CNLARCQLSC KSLGLKGGCA GSFCACG

Absolute stereochemistry.

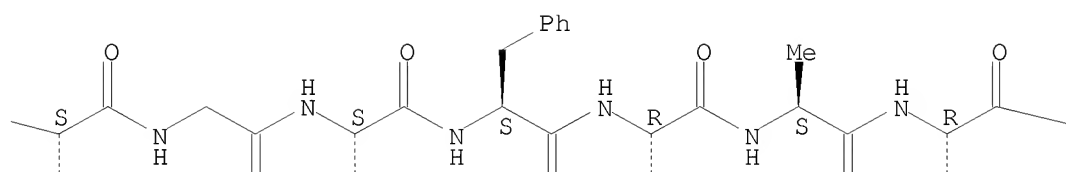
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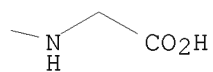
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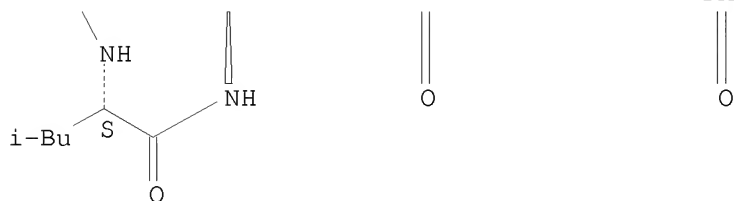
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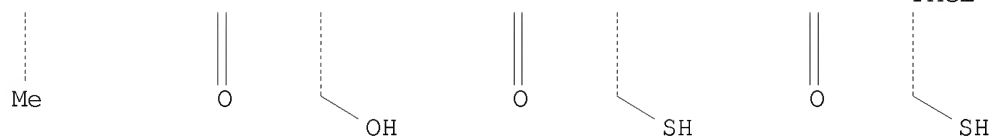
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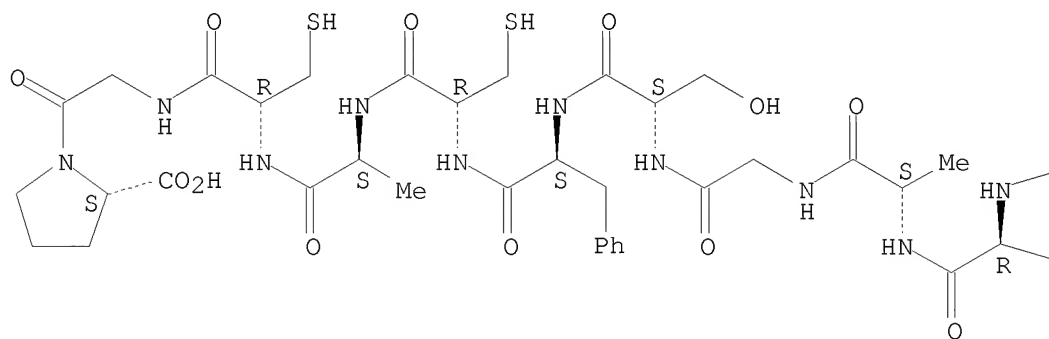


RN 326494-28-4 HCAPLUS
 CN L-Proline, L-cysteinyl-L-asparaginyl-L-leucyl-L-alanyl-L-arginyl-L-cysteinyl-L-glutaminyl-L-leucyl-L-arginyl-L-cysteinyl-L-lysyl-L-seryl-L-leucylglycyl-L-leucyl-L-leucylglycyl-L-lysyl-L-cysteinyl-L-alanylglycyl-L-seryl-L-phenylalanyl-L-cysteinyl-L-alanyl-L-cysteinylglycyl- (CA INDEX NAME)

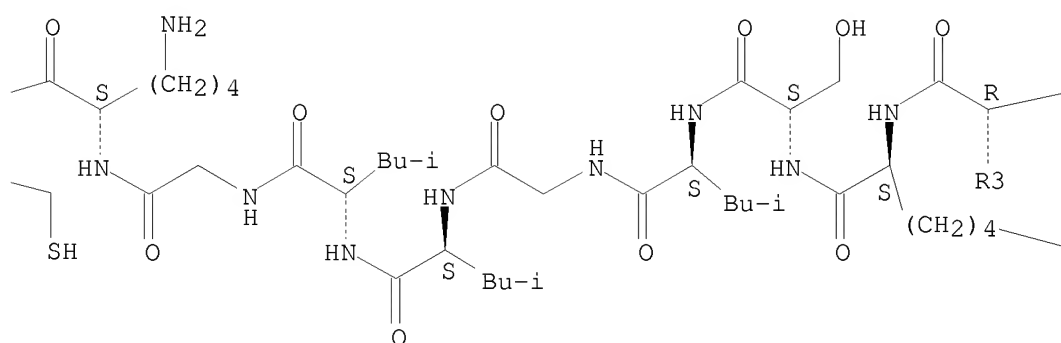
SEQ 1 CNLARCQLRC KSLGLLGKCA GSFCACGP

Absolute stereochemistry.

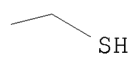
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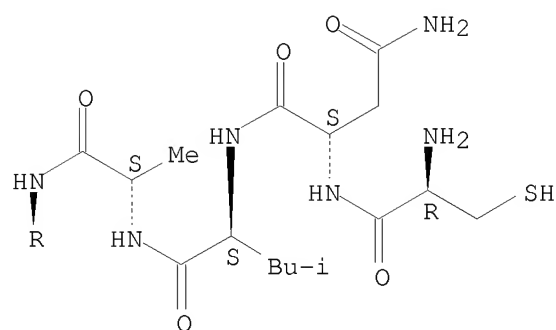
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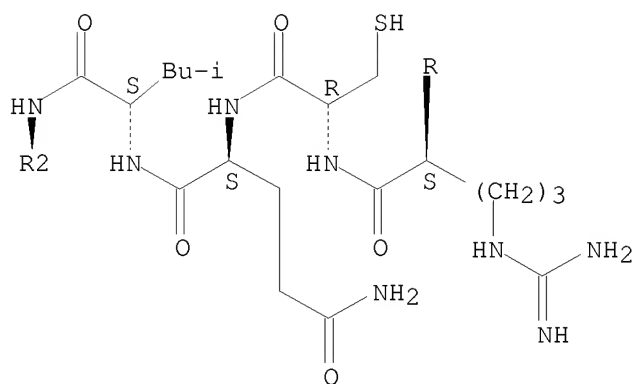
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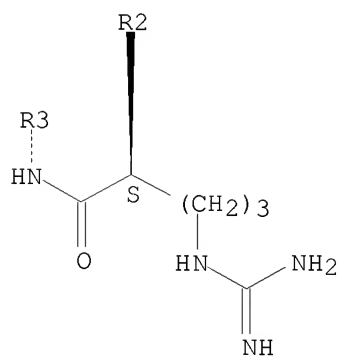
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COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
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FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
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CA SUBSCRIBER PRICE

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 15:18:14 ON 28 SEP 2008